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1 - OSM : Comm: Listing Is

Oregon
John A. Kitzhaber, M.D., Governor

Department of Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696
TTY (503) 229-6993

January 18, 2002

CERTIFIED MAIL NO. 7000 1670 0009 9005 7038
RETURN RECEIPT REQUESTED

Drew Gilpin
Oregon Steel Mills Inc.
PO Box 2760
Portland, Oregon 97208

RE: NOTICE TO CURRENT AND/OR PAST OWNERS AND OPERATORS OF DECISION TO LIST CONTAMINATED PROPERTY ON THE CONFIRMED RELEASE LIST (CRL) AND INVENTORY
Oregon Steel Mills-Rivergate
14400 N. Rivergate Blvd., Portland
ECSI ID NO. # 141

Dear Mr. Gilpin:

By letter dated June 18, 2001 the Department of Environmental Quality (Department) notified you as an owner or operator of the Oregon Steel Mills-Rivergate site of the Department's proposal to add this facility to the Confirmed Release List (CRL) and Inventory. The notice invited comments on the proposed listing.

DEQ received comments from Stoel Rives LLP in a letter dated October 1, 2001, on behalf of Oregon Steel Mills (OSM) regarding the second notice for proposed listing of the OSM-Rivergate site. Based upon the comments, DEQ reviewed and updated the Environmental Cleanup Site Information database (ECSI) to accurately reflect current conditions at the site. This updated information was provided to OSM for additional comment prior to completing the listing process. The basis for listing the site remains soil and groundwater analytical data from the October 2000 Pre-Remedial Investigation field activities

Oregon Steel Mills-Rivergate meets the criteria for listing, and with this notice the Department is adding it to the CRL and Inventory. Enclosed is the Site Summary Report, which includes the information about the Oregon Steel Mills-Rivergate site that will appear on the CRL and Inventory.

The Department updates the CRL and Inventory quarterly and provides copies to area newspapers and to the public upon request. A facility can be removed from the CRL and Inventory after all necessary

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cleanup is completed. If you are not already working with the Department but plan to investigate or clean up the site, please contact us. We want to work together to eliminate threats to Oregon from hazardous materials.

As noted in the earlier letter to you, listing your property does not necessarily mean that you are responsible for the contamination, investigation or cleanup. Responsibility for these costs is prescribed by various provisions in state and federal laws. If you have specific questions about the CRL or Inventory, or want copies of the statute or regulations governing the Department's site assessment, listing, or cleanup processes, please contact Listing Coordinator Kimberlee Van Patten at (503) 229-5256 or at the address shown on the letterhead.

Sincerely,

Charles W. Donaldson
Manager
Emergency Response and Site Assessment

Enclosures: Site Summary Report
cc: Bruce Brodyheine, NWR, DEQ
ECSI File # 141

OSM Comm - Listing file

BRODYHEINE Bruce
From: GilpinD@osm.com
Sent: Tuesday, December 18, 2001 7:07 PM
To: BRODYHEINE Bruce
Subject: RE: OSM ECSI reveiw and response

Hmmmm.....I'm in Napa now and will not return until Thursday. I was able to get a copy of the text as written and have provided it below. Let me know if the hard copy does not arrive by Wednesday of this week. That will give me time to re-mail the letterhead copy before (b) (6)

If we don't talk before 2002, have a happy holiday!

"Dear Bruce:

Oregon Steel Mills ("Oregon Steel") is in receipt of the updated ECSI site summary report for the Rivergate property. Oregon Steel appreciates your prompt response to Oregon Steel's comments on the proposed listing. Oregon Steel also appreciates the Department's attention to detail in making the revisions. We believe that the revised ECSI summary report is a fair summary of the site conditions based on the information available at this time.

There is only one suggested revision that we request the Department make before placing the site on the Confirmed Release List. On page 2, under "Hazardous Substances/Waste Types," the Department includes "mineral spirits" in a long list of types of paint wastes. Oregon Steel is not aware of any information that would indicate that mineral spirits are an issue at the site. Please delete this reference to mineral spirits. Otherwise, the ECSI site summary report appears to be based on accurate and current information.

Please call me if you have any additional questions."

-----Original Message-----

From: **BRODYHEINE.Bruce@deq.state.or.us**
[mailto:BRODYHEINE.Bruce@deq.state.or.us]
Sent: Tuesday, December 18, 2001 3:27 PM
To: gilpind@osm.com
Subject: OSM ECSI reveiw and response

Drew,

Last week (I believe on Tuesday), you mailed OSM's review comments to the revised ECSI summary sheet to me. The mail seems a bit slower than I remembered, because I have not received this letter yet. So, while I wait for the hard copy to arrive in the mail, could you please fax a copy of your letter to me.

Fax number: 503.229.6899

Thank you,

Bruce Brody-Heine
Hydrogeologist
Oregon DEQ - Northwest Region
Voluntary Cleanup Program
(503)-229-6915
brodyheine.bruce@deq.state.or.us

<mailto:brodyheine.bruce@deq.state.or.us>

OSM : 141
Comm: Listing-file

OREGON STEEL MILLS

P. O. Box 2760
Portland, Oregon 97208-2760
Phone (503) 286-9651

RECEIVED
JAN 3 2002
DEPT OF ENVIRONMENTAL QUALITY
NORTHWEST REGION

December 10, 2001

Mr. Bruce Brody-Heine
Project Manager
Voluntary Cleanup and Portland Harbor Section
Oregon Department of Environmental Quality
2020 SW Fourth Ave, Suite 400
Portland, OR 97201-4987

Subject: **ESCI Site Summary**
Oregon Steel Mills, Rivergate Property

Dear Bruce:

Oregon Steel Mills ("Oregon Steel") has received the updated ECSIsite summary report for the Rivergate property. Oregon Steelappreciates your prompt response to Oregon Steel's comments on the proposed listing. Oregon Steel also appreciates the Department's attention to detail in making the revisions. We believe that the revised ECSI summary report is a fair summary of the site conditions based on the information available at this time.

There is only one suggested revision that we request the Department make before placing the site on the Confirmed Release List. On page 2, under "Hazardous Substances/Waste Types," the Department includes "mineral spirits" in a long list of types of paint wastes. Oregon Steel is not aware of any information that would indicate that mineral spirits are an issue at the site. Please delete this reference to mineral spirits. Otherwise, the ECSI site summary report appears to be based on accurate and current information.

Please call me if you have any additional questions.

Sincerely,
OREGON STEEL MILLS, INC.

ANDREW J GILPIN
Manager, Environmental Services
Oregon Steel Division

cc: Krista Born, Stoel Rives

osm 141
Comm - Listing Ltr

Oregon
John A. Kitzhaber, M.D., Governor

Department of Environmental Quality
Northwest Region Portland Office
2020 SW 4th Avenue, Suite 400
Portland, OR 97201-4987
(503) 229-5263
FAX (503) 229-6945
TTY (503) 229-5471

November 8, 2001

Mr. Drew Gilpin
Environmental Services Manager
Oregon Steel Mills Inc.
P.O. Box 2760
Portland, Oregon 97208

RE: Updated ECSI Summary Report
Proposal To Add Property to DEQ's Confirmed Release List and Inventory
Oregon Steel Mills-Rivergate
14400 N. Rivergate Blvd., Portland
ECSI ID # 141

Dear Mr. Gilpin:

Attached, please find a copy of the updated Oregon Department of Environmental Quality (DEQ) Environmental Cleanup Site Information (ECSI) site summary report for the Oregon Steel Mills (OSM) Rivergate property. We request that OSM provide comments on the updated ECSI summary report within 30 days of receiving it. We can discuss any comments you have at that time, and discuss how to address any proposed revisions.

The basis for listing the site, as stated in DEQ's June 18, 2001 listing proposal package, remains soil and groundwater analytical data from the October 2000 Pre-Remedial Investigation field activities. As previously discussed, following your review of the attached ECSI report, the site will be added to the CRL and Inventory.

Please contact me at (503) 229-6915 if you have any questions.

Sincerely,

Bruce Brody-Heine

Bruce Brody-Heine, R.G.
Project Manager
Voluntary Cleanup and Portland Harbor Section

cc: Gil Wistar, HQ, DEQ
Micheal E. Rosen, NWR, DEQ
ECSI File # 141
Rod Struck, NWR, DEQ
Krista Born, Stoel Rives

ENVIRONMENTAL CLEANUP SITE INFORMATION
SITE SUMMARY REPORT

November 08, 2001 12:11 pm

SITE ID: 141 SITE NAME: Oregon Steel Mills - Rivergate CERCLIS NO: 009106055

ALIASES: Gilmore Steel Corp. - Rivergate

ADDRESS: 14400 N Rivergate BLVD Portland 97203

COUNTY: MULTNOMAH REGION: NWR

INVG STATUS: SUS NPL SITE: N ORPHAN SITE: N STUDY AREA: N

PROPERTY: TWNSHP/RANGE/SECT: 2N,1W,26 TAX LOTS: 1 of Lot 1 (R64977 4290)

LATITUDE: 45 deg.37'41" LONGITUDE: 122 deg.46'53" SITE SIZE: 145 acres

STUDY AREAS:

STUDY ID	STUDY NAME	INVG STATUS
1544	Lower Willamette River Basin Study Area (LWRBSA)	XCN
2339	V.A.- Designated National Estuaries	XCN
2340	V.A.- Surface Waters, WQ-Limited for Toxics	XCN
2068	Portland Harbor Sediments	XCN

FACILITIES: NAME: Oregon Steel Mills - Rivergate

COMMNETS: Steel rolling and finishing mill

YEARS OF OPERATION:

SIC CODES: 3312 OPERATING STATUS: Active

PERMITS:	PERMIT NO:	PERMIT TYPE	ISSUED BY	COMMENTS
	100170	NPDES	DEQ/WQ	
	26-1865	ACDP	DEQ/AQ	
	1207	WQ GEN12H	DEQ	

HAZARDOUS SUBSTANCES/WASTE TYPES:

Suspected or confirmed hazardous substances currently or historically present at the site include: petroleum associated with the former oil sump (pre-1961); PCBs; petroleum from existing UST, AST, and drips, spills, and leaks; paint wastes (mineral spirits, lead, cadmium, chromium, copper, manganese and zinc); and metals such as, but not limited to, zinc, lead, cadmium, chromium, nickel, and copper.

MANNER AND TIME OF RELEASE:

Spills and seepages associated with the former oil sump between approximately 1944 and 1961. General steel mill operations, and associated spills and leaks from 1967 to present.

CONTAMINATION INFORMATION:

(11/3/01 BBH/VCP) Oregon Steel Mills purchased the property from the Port of Portland in 1967 and is the current owner. Prior to 1967 (between approximately 1944 and 1961), petroleum releases associated with ponds labeled "oil sump" occurred. No evidence of these ponds was present in 1967. During OSM operations at the site, numerous spills (typically petroleum releases) have been reported, and specific releases of hazardous substances discovered, including: 1982, 1985, and 1991 identification of PCB releases to soil; releases from UST and AST to soil and groundwater; and metals, PCBs, and hydrocarbons in soils at the discharge point of OSM stormwater outfalls. Other potential sources of contamination are being evaluated by OSM and will be presented in a report to be submitted to DEQ in November 2001.

PATHWAYS:

1) Surface water runoff and groundwater discharge to the Willamette River; 2) particulate transport to the river or to human receptors; 3) direct contact or incidental ingestion of contaminated soil, sediment, or groundwater.

SUBSTANCE CONTAMINATION

SUBSTANCE	MEDIA CONTAMINATED	CONCENTRATION LEVEL	EVIDENCE	OBSERV. DATE
CADMIUM	Soil	13.0 ppm (Scrap yard)	Owner	12OCT1994
	Sediment	2.1 ppm (Pre-RI)	Laboratory Data Owner	20OCT2000

	Sediment	2.1 ppm (Pre-RI)	Laboratory Data	20OCT2000
	Date released: Unknown Quantity Released: Unknown Data Source: Scrap yard Inv. '94; Pre-RI Field Data Feb 2001.			
CHROMIUM	Soil	2,340 ppm (Scrap Yard)	Owner Laboratory Data	12OCT1994
	Sediment	819 ppm (Pre-RI)	Owner Laboratory Data	20OCT2000
	Date released: Unknown Quantity Released: Unknown Data Source: Scrap yard Inv. '94; Pre-RI Field Data Feb 2001.			
COPPER	Soil	2,790 ppm (Scrap yard)	Owner Laboratory Data	12OCT1994
	Sediment	148 ppm (Pre-RI)	Owner Laboratory Data	20OCT2000
	Date released: unknown Quantity Released: unknown Data Source: Scrap yard Inv. '94; Pre-RI Field Data Feb 2001.			
LEAD	Soil	820 ppm (Scrap yard)	Owner Laboratory Data	12OCT1994
	Sediment	166 ppm (Pre-RI)	Owner Laboratory Data	20OCT2000
	Date released: Unknown Quantity Released: Unknown Data Source: Scrap yard Inv. '94; Pre-RI Field Data Feb 2001.			
PCBs	Sediment	9,300 ppb (Pre-RI)	Owner Laboratory Data	20OCT2000
	Date released: unknown Quantity Released: unknown Data Source: Pre-RI Field Data Feb 2001.			
POLYAROMATIC HYDROCARBONS (PA	Sediment	HPAHs 40 ppm (Pre-RI)	Owner Laboratory Data	20OCT2000
	Sediment	LPAHs 15 ppm (Pre-RI)	Owner Laboratory Data	20OCT2000
	Soil	HPAHs 180 ppm (Pre-RI)	Owner Laboratory Data	20OCT2000
	Soil	LPAHs 330 ppm (Pre RI)	Owner Laboratory Data	20OCT2000
	Date released: unknown Quantity Released: unknown Data Source: Pre-RI Field Data Feb 2001.			
TOTAL PETROLEUM HYDROCARBONS	Groundwater	TPH-Dx 9,100 ppb	Owner Laboratory Data	20OCT2000
	Soil	TPH-Dx 26,000 ppm	Owner Laboratory Data	20OCT2000
	Date released: unknown Quantity Released: unknown			

Data Source: Pre-RI Field Data Feb 2001.

ZINC	Sediment	823 ppm (Pre-RI)	Owner Laboratory Data	01OCT2000

Data Source: Pre-RI Field Data Feb 2001.

ENVIRONMENTAL/HEALTH THREATS:

Potential risks associated with 1) direct contact or ingestion of contaminated sediments by aquatic organisms, birds, or mammals; 2) consumption of fish or crayfish caught by recreational anglers; and 3) incidental ingestion or dermal contact with contaminated soil, sediments or groundwater by human receptors.

STATUS OF INVESTIGATIVE OR REMEDIAL ACTION:

(8/5/99 TG/SAP) DEQ recommends a high-priority Remedial Investigation to evaluate sediment contamination. (11/2/01 BBH/VCP) OSM has conducted previous investigations and remedial actions at the site. The 1982, 1985, and 1991 PCB release areas were remediated by excavating soil, reportedly to levels protective of human health; however, confirmation samples are not available to evaluate the residual risk. Soil investigations have been conducted in the scrap yard area (October 1994) and Mosely Sheer area (October 1996). Currently, OSM has an active spill response program, and is monitoring groundwater (in association with the AST gasoline release and UST release near the Rolling Mill). OSM is completing a Pre-RI to identify and evaluate potential contaminant sources and is sampling soil, groundwater, and sediments to determine if the identified sources have released hazardous substances to the environment. Results of of an initial Pre-RI submitted to DEQ in February 2001 confirmed the presence of the former "oil-sump" in the southwestern portion of the site.
DEQ is reviewing these results, as well as OSM's additional historical research.

REMEDIAL ACTION FUNDING:

Owner, operator or other party under agreement, order or consent decree under ORS 465.200 or 465

INVESTIGATIVE, REMEDIAL, AND ADMINISTRATIVE ACTIONS

ACTION	START DATE	COMPL. DATE	RESP. STAFF	AGENCY CODE	REGION	LEAD PROGRAM
Site added to database	16AUG1988		John Odisio	DEQ		SAS
Responsible party notified re	30NOV1988			DEQ		SAS

11/88 Inventory listing

SITE EVALUATION	27FEB1990	27FEB1990	John Odisio	DEQ	HQ	SAS
State Basic Preliminary Assessment recommended (PA)	27FEB1990	27FEB1990	John Odisio	DEQ	HQ	SAS
BASIC PRELIMINARY ASSESSEMENT COMMENTS: Federal.	28FEB1990	28FEB1990	John Odisio	DEQ		SAS
Site added to CERCLIS	17SEP1991			EPA		
EPA Basic Preliminary Assessment COMMENTS: Site deferred to EPA Region 10's RCRA unit.	03SEP1992	03SEP1992		EPA		
SITE EVALUATION	05AUG1999	05AUG1999	Thomas Gainer	DEQ	NW	SAS
Remedial Investigation recommended (RI) Priority for Further Action: HIGH COMMENTS: Strategy Recommendation - High priority for an RI.	05AUG1999	05AUG1999	Thomas Gainer	DEQ	NW	SAS

LAST UPDATED BY: DATE: 08-NOV-01

Proposal for Confirmed Release List recommended	01OCT1999	01OCT1999	Thomas Gainer	DEQ	NW	SAS
COMMENTS: Gasoline spill and associated gw contamination.						
Proposal for Inventory recommended	01OCT1999	01OCT1999	Thomas Gainer	DEQ	NW	SAS
COMMENTS: Gasoline spill and associated gw contamination.						
Facility proposed for Confirmed Release List	12NOV1999	12NOV1999	Kim Van Patten	DEQ	NW	SAS
Facility proposed for Inventory	12NOV1999	12NOV1999	Kim Van Patten	DEQ	NW	SAS
Extension requested by owner/operator	15DEC1999	15DEC1999	Kim Van Patten	DEQ	NW	SAS
Petition or request granted	27DEC1999	27DEC1999	Kim Van Patten	DEQ	NW	SAS
COMMENTS: Extension granted to February 18, 2000.						
Owner/operator comments received on listing notification	17FEB2000	17FEB2000	Kim Van Patten	DEQ	NW	SAS
COMMENTS: Comments from HartCrowser.Proposed listing pulled, pending site re-evaluation.						
Letter Agreement	29FEB2000	14JUN2000	Rod Struck	DEQ	NW	VCS
COMMENTS: Voluntary Agreement for RI and Scope of Work.						
NEGOTIATIONS	29FEB2000	14JUN2000	Rod Struck	DEQ	NW	VCS
BASIC PRELIMINARY ASSESSEMENT	14JUN2000	05FEB2001	Rod Struck	DEQ	NW	VCS
COMMENTS: PA submitted. Historical Summary Memo.						
EXPANDED PRELIMINARY ASSESSMENT	14JUN2000	05FEB2001	Rod Struck	DEQ	NW	VCS
COMMENTS: XPA submitted. Field Activity Data Report.						
REMEDIAL INVESTIGATION	17JUN2000		Rod Struck	DEQ	NW	VCS
Place on hold	13OCT2000	13OCT2000	Rod Struck	DEQ	NW	VCS
COMMENTS: Decision to defer CRL/INV listing decision pending outcome of pre-RI assmt.						
Proposal for Confirmed Release	06APR2001	06APR2001	Rod Struck	DEQ	NW	VCS

List recommended						
Proposal for Inventory recommended	06APR2001	06APR2001	Rod Struck	DEQ	NW	VCS
Facility proposed for Confirmed Release List	18JUN2001	18JUN2001	Kim Van Patten	DEQ	NW	VCS
Facility proposed for Inventory	18JUN2001	18JUN2001	Kim Van Patten	DEQ	NW	VCS
Extension requested by owner/operator COMMENTS: Krista Born, Stoel Rives	06AUG2001	06AUG2001	Kim Van Patten	DEQ	NW	VCS
Petition or request granted COMMENTS: New due date 10/1/1.	23AUG2001	23AUG2001	Kim Van Patten	DEQ	NW	VCS
Owner/operator comments received on listing notification COMMENTS: Letter from Krista Born, Stoel Rives	01OCT2001	01OCT2001	Kim Van Patten	DEQ	HQ	SAS

ACTIVE PROJECTS

PROJECT ID	PROJECT NAME
7880	Oregon Steel Mills

COMMENT:

PARTY INFORMATION

SITE CONTACT:

Drew Gilpin
Mgr Environ Svcs - Portland Steelworks
Oregon Steel Mills Inc
14400 N Rivergate Blvd
Portland , OR 97208-2760
PHONE: (503) 978-6189

ASSOCIATED PARTIES NAME AND ADDRESS	AFFILIATION	AFFILIATION STATUS	INFORMATION AS OF DATE
Drew Gilpin	Facility Operator		05NOV2001

Mgr Environ Svcs - Portland
Steelworks
Oregon Steel Mills Inc
14400 N Rivergate Blvd
PO Box 2760
Portland , OR 97208-2760
(503) 978-6189(FAX (503) 240-5237)
COMMENTS:

Manager Interested Party 05NOV2001
Port of Portland
121 NW Everett Street
PO Box 3529
Portland , OR 97208-3529
(503) 944-7000
COMMENTS: CREATED BY CONVERSION OF CDS SOURCES
Former property owner (1943-1967).

OWNERSHIP COMMENTS:

DATA SOURCES: NWR Cleanup, HW, AQ, WQ files; "Contractual Documentation for Part A Application" (12/19/91); inspection reports; correspondence from owner and/or operator; Notice of Violation letter; hazardous waste manifests; lab results; 2/19/99 OSM submittal of Site Assessment Requested Information; July 2000, Pre-RI Workplan - Phase I; September 2001, Pre-RI Workplan - Phase II.

LAST UPDATED BY: DATE: 08-NOV-01

(site_report.rpt)

OSM: Comm Listing #6
141

Oregon
John A. Kitzhaber, M.D., Governor

Department of Environmental Quality
Northwest Region Portland Office
2020 SW 4th Avenue, Suite 400
Portland, OR 97201-4987
(503) 229-5263
FAX (503) 229-6945
TTY (503) 229-5471

October 22, 2001

Mr. Drew Gilpin
Environmental Services Manager
Oregon Steel Mills Inc.
P.O. Box 2760
Portland, Oregon 97208

RE: Proposal To Add Property to DEQ's Confirmed Release List and Inventory
Oregon Steel Mills-Rivergate
14400 N. Rivergate Blvd., Portland
ECSI ID # 141

Dear Mr. Gilpin:

The Oregon Department of Environmental Quality (DEQ) has received Oregon Steel Mill's (OSM) comments to DEQ's proposal to add the OSM-Rivergate property to the Confirmed Release List (CRL) and Inventory, submitted on your behalf by Krista Born with Stoel Rives LLP, on October 1, 2001. DEQ is in agreement that the listing should be based on accurate and reliable information. Your comment letter raises several good points that we can and will address regarding the accuracy of the information presented in DEQ's Environmental Cleanup Site Information database (ECSI).

The basis for listing the site, as stated in DEQ's June 18, 2001 listing proposal package, remains soil and groundwater analytical data from the October 2000 Pre-Remedial Investigation field activities. ECSI will be corrected to reflect this information. Following the review and comment by DEQ on your Pre-Remedial Investigation Report (expected late November 2001), which will provide clarification to several of the remaining issues raised in your letter, we will again update the ECSI database to reflect any new site information.

As discussed in our telephone conversation on October 8, 2001, we will provide you with an updated copy of the Site Summary Report for your review by November 6, 2001. We request that OSM provide comments on the updated ECSI summary sheet within 30 days of receiving it. We can discuss any comments you have at that time, and discuss how to address any proposed revisions. Then, once ECSI has been updated, the site will be added to the CRL and Inventory.

DEQ appreciates the comments you provided and the progress being made in addressing the Pre-RI at the facility. Please contact me at (503) 229 6915 if you have any questions.

Sincerely,

Bruce Brody-Heine

Bruce Brody-Heine, R.G.
Project Manager
Voluntary Cleanup and Portland Harbor Section

cc: Charles Donaldson, HQ, DEQ
Gil Wistar, HQ, DEQ
Micheal E. Rosen, NWR, DEQ
Rod Struck, NWR, DEQ
Krista Born, Stoel Rives
ECSI File # 141

DEQ-DCI

OSM 141
CRL ~~Listing~~ letter

VOLUNTARY CLEAN UP AND SITE ASSESSMENT
PHONE MEMO

FILE: 141
OSM

DATE: 10/8/01 TIME: 4:00 pm

CALL FROM/TO: Drew Gilpin

TITLE: Environmental Manager

COMPANY: OSM

LOCATION: Portland Site

PHONE NO: 503 978 - 6189

CC:

RE: CRL Response Letter.

SUMMARY OF CALL:

10/8/01 • Left message for Drew regarding wanting to talking about the CRL Response letter dated 10/1/01 from Stoel Rives

10/8/01 4:00pm

— Administrative proceedures - what would they like to do?

• Options → ① new formal listing ② update ECSI – OSM review then list

• We will update the database.

PCB & metals # in listing/ECSI database → where do they come from? DEQ will go back and verify any #s.

* Drew states option ② will be great. Then we clarified what listings mean, and that the issues presented on current ECSI summary sheet will not be used for listing however; DEQ does not necessarily agree with the letters conclusion → These issues are still the subject of the

SIGNATURE: Beere Brody-Haine

→ Final Pre-RI ~~Pt Work~~ to be submitted / reviewed and approved/ rpt due in Nov. 2001.

→ checked to see if Drew Recieved the Suggested Outline letter — he has the letter.

Comments on

(over) →

Actions

(1) DEQ will send an acknowledgement letter to Drew with our actions and a schedule

(2) Update ECSI database – send to OSM

(3) Following comments, if any from OSM – list site.

STOEL RIVES LLP
ATTORNEYS

STANDARD INSURANCE CENTER
900 SW FIFTH AVENUE, SUITE 2600
PORTLAND, OREGON 97204-1268
Phone (503) 224-3380 Fax (503) 220-2480
TDD (503) 221-1045
Internet: www.stoel.com

October 1, 2001

KRISTA I. BORN
Direct Dial
(503) 294-9675
email kiborn@stoel.com

DEPT. OF ENVIRONMENTAL QUALITY
RECEIVED
OCT 0 1 2001
ENVIRONMENTAL CLEANUP DIVISION

VIA HAND DELIVERY

Mr. Charles W. Donaldson
Oregon Department of Environmental Quality
Site Assessment Program
Environmental Cleanup Division
811 SW 6th Avenue, 8th Floor
Portland, OR 97204

Re: Proposal to Add Property to DEQ's Confirmed Release List and Inventory
Oregon Steel Mills-Rivergate
14400 N. Rivergate Blvd., Portland
ESCI ID #141

Dear Mr. Donaldson:

Oregon Steel Mills ("OSM") is in receipt of the Oregon Department of Environmental Quality's ("DEQ") Notice to add the above-listed property (the "Rivergate Site" or "Site") to the Confirmed Release List ("CRL") and Inventory. OSM does not dispute that DEQ has sufficient information in its file to place the Site on the CRL and Inventory. However, DEQ's proposal and Site Summary Report does not meet the statutory requirements for listing because it is based upon insufficient and inaccurate information. OSM respectfully requests that DEQ revise and reissue its proposal to ensure that the information relied upon by DEQ, and ultimately provided to the public, is complete, accurate, and reliable in accordance with the statutory criteria.

A. SIGNIFICANCE OF CRL AND INVENTORY

The sole purpose of the CRL and Inventory is to provide information to the public about a confirmed release at a facility. ORS 465.215(1) ("For the purposes of providing public information, the Director of the Department of Environmental Quality shall develop and maintain a list of all facilities with a confirmed release * * *"); 465.225(1) ("For the purpose

of providing public information, the Director of the Department of Environmental Quality shall develop and maintain an inventory of all facilities * * *"). The public, including financial institutions, prospective buyers, and lessors, look to the CRL and Inventory as a reliable and accurate source of information about the environmental conditions at a site.

Importantly, DEQ's act of placing a property on the CRL and Inventory can have an immediate and very real impact on that property's value. For this reason, it is extremely important that the CRL and Inventory provide an accurate and complete description of the facility and its "confirmed releases." Indeed, the rules require a high quality of evidence for the information relied upon for CRL and Inventory listing decisions. OAR 340-122-0073(1)(a).

The legislature delegated to DEQ the responsibility to provide information to the public about confirmed releases at facilities located in the state of Oregon. It would be an abuse of regulatory discretion and unjust to the property owner if DEQ did not carefully review the site information and ensure that the information provided to the public is accurate and complete. It appears to OSM that DEQ's proposal to list the Rivergate Site is neither accurate nor complete, and thus fails to meet the statutory criteria for listing. For this reason, OSM respectfully requests that DEQ withdraw the proposal to place the Site on the CRL and Inventory and reissue the proposal taking into account the below comments.

B. STATUTORY REQUIREMENTS FOR LISTING A SITE ON THE CRL AND INVENTORY

1. Specific Facts to Be Considered in CRL Listing Determination

The statute and regulations require DEQ to provide OSM with the factual basis for placing the Site on the CRL. The statute describes specifically the details that *must* be included in the facility CRL listing, if known:

"(a) A general description of the facility;

"(b) Address or location;

"(c) Time period during which a release occurred;

"(d) Name of the current owner and operator and names of any past owners and operators during the time period of a release of a hazardous substance;

"(e) Type and quantity of a hazardous substance released at the facility;

"(f) Manner of release of the hazardous substance;

"(g) Levels of a hazardous substance, if any, in ground water, surface water, air and soils at the facility;

"(h) Status of removal or remedial actions at the facility; and

"(i) Other items the director determines necessary." ORS 465.215(3).

This list comprises the details the legislature specifically intended to be available to the public. ORS 465.215(1)-(3). This is the same set of details that the legislature intended to be included in the notice that DEQ is required to provide to the facility owner 60 days before adding a facility to the CRL. ORS 465.215(4).

2. Quality of Evidence That DEQ Must Rely on In Its Decision to Place a Site on the CRL or Inventory

The rules under which DEQ operates specifically prescribe the quality of the evidence on which DEQ must rely when making CRL and Inventory listing decisions. These rules require a high quality of evidence because of the very significant, unjust economic harm that would be suffered by the property owner if DEQ were to wrongfully list a property without sufficient basis.

In particular, the rules state that DEQ may only list a site on the CRL or Inventory if a release of a hazardous substance

"has been documented by:

"(A) An observation made and documented by a qualified government inspector or agent;

"(B) A written statement or report from an owner, operator, or representative authorized by an owner or operator stating that the release has occurred; or

> "(C) Laboratory data indicating the hazardous substance has been detected at levels greater than background levels." OAR 340-122-0073(1)(a).

3. Additional Evidentiary Requirements for Listing a Site on the Inventory

In addition to requiring DEQ to document a confirmed release as defined above, placement on the Inventory requires DEQ to

> "determine[] that additional investigation, removal, remedial action, long-term environmental controls or institutional controls are needed to assure protection of *present* and *future* public health, safety, welfare or the environment." ORS 465.225(1) (emphasis added).

The legislature mandated that this determination "shall be based upon a preliminary assessment approved or conducted by the department." ORS 465.225(2). The notice to the owner or operator of proposed placement on the Inventory must include a copy of this preliminary assessment, unless already provided. OAR 340-122-0075(3)(a).

The rules also require that DEQ score the facilities placed on the Inventory, and the notice of the proposed listing must include a copy of the documentation used to calculate the site score, unless already provided. OAR 340-122-0076(1)(a), 340-122-0075(3)(a).

4. Releases That Are Not Significant Enough To Be the Basis for a CRL and Inventory Listing

The legislature has also set a threshold that must be exceeded before a release can be considered the basis for a CRL and Inventory listing. DEQ may not designate a release a "confirmed release" if the subject release falls into any of the following categories:

> "(a) De minimis releases;
>
> "(b) Releases that by their nature rapidly dissipate to undetectable or insignificant levels;
>
> "(c) Releases specifically authorized by and in compliance with a current and legally enforceable permit issued by the

Department of Environmental Quality or the United States Environmental Protection Agency; or

"(d) Other releases that the commission finds pose no significant threat to present and future public health, safety, welfare or the environment." ORS 465.405(2).

The legislature specifically stated that DEQ must exclude from the CRL and Inventory any releases that DEQ determines have been cleaned up to a level that:

"(a) Is consistent with rules adopted by the commission under ORS 465.400; or

"(b) Poses no significant threat to present or future public health, safety, welfare or the environment." ORS 465.405(3).

In adopting rules to implement the statute, the Environmental Quality Commission ("EQC") adopted these statutory exclusions and, in addition, added the following circumstances under which a release cannot be the basis for a CRL or Inventory listing:

"(d) The release is a pesticide product * * *;

* * * * *

"(f) The release otherwise requires no additional investigation, removal, remedial action or long-term environmental or institutional controls related to removal or remedial action to assure protection of *present* and *future* public health, safety, welfare, and the environment." OAR 340-122-0073(2) (emphasis added).

C. DEQ's PROPOSAL DOES NOT MEET THE STATUTORY REQUIREMENTS

DEQ's proposal to list the Rivergate Site on the CRL and Inventory is based on the detection of petroleum hydrocarbons, polycyclic aromatic hydrocarbons ("PAHs"), metals, and polychlorinated biphenyls ("PCBs") in soil, groundwater, and Willamette River sediments on or adjacent to the Site. While the detection of these substances may justify placement of the Site on the CRL and Inventory, the release information DEQ provides is either incomplete,

inconsistent with the statutory requirements for listing, or simply not verifiable. First, DEQ fails to provide information regarding prior ownership history. Second, DEQ lists five specific releases under the "Contamination Information" in the ECSI Site Summary Report, but not one of these descriptions is accurate. In fact, several releases cited by DEQ have been cleaned up and there is no evidence that the release poses a significant threat to present or future public health, safety, welfare or the environment. Third, DEQ cites detections of metals that are not found within any of the documentation on which DEQ relies, and therefore OSM, or anyone else, has no way of knowing where or when these metals were detected. Finally, DEQ does not provide any information regarding the site scoring calculation required for placement on the Inventory.

1. **DEQ Fails to Provide the Names of Past Owners and Operators at the Time Period of the Release(s)**

A fundamental error of DEQ's proposal is its failure to provide information regarding past owners and operators at the time period of the releases as required by ORS 465.215(3)(d). As documented extensively in the February 2001 and March 2001 Pre-Remedial Investigation Reports submitted by Exponent (collectively, the "Pre-RI Reports"), OSM acquired the Site from the Port of Portland in 1967. Based on historical records and aerial photographs, the "oil sump" was in operation at the Site from approximately 1944 to the early 1960s, during the time period that the Port of Portland owned the Site. Nevertheless, DEQ fails to list the Port of Portland as a prior owner or operator.

First, in the Site-Specific Worksheet, DEQ states that the "persons who may have owned/operated the facility when the release occurred" is provided in the "Parties" section of the ECSI Site Summary Report. (Site-Specific Worksheet, Part G.5.) However, the "Parties" section in the ECSI Site Summary Report only lists OSM and affiliated contacts.

Second, under the "Contamination Information" on the Site Summary Report, DEQ lists five releases that occurred at the Site, including "petroleum releases associated with former 'oil sump.'" The statute requires DEQ to list the past owners during the time period of a release, if known. ORS 465.215(3)(d). The Pre-RI Reports document that the "oil sump" was at the Site from approximately 1944 to the early 1960s, prior to OSM's acquisition. Yet DEQ generalizes the release information and attributes all five releases to the "Company," presumably OSM, without any mention that the Port of Portland owned the Site during the time period that the "oil sump" was being used and OSM operations were not yet present.

OSM requests that DEQ list all prior owners in the "Parties" section of the Site Summary Report, including the Port of Portland, and specify, where known, which of these

Parties owned or operated the Site for each of the releases included in the "Contamination Information" section.

2. The Release Information is Not Accurate

The remaining four releases listed in the "Contamination Information" section of the Site Summary Report must be revised or completely removed from the proposal. On February 17, 2000, Hart Crowser submitted comments to DEQ on behalf of OSM in response to DEQ's initial proposal to list the Site (the "Hart Crowser Letter"). In addition, Exponent prepared and submitted a report to DEQ entitled "Pre-Remedial Investigation Historical Investigation Report" dated March 21, 2001 (the "Historical Investigation Report"). The Historical Investigation Report analyzes the potential sources at the Site to determine whether the source has been closed and addressed, or whether it requires further investigation. However, it appears that DEQ did not consider this information in the proposed listing. OSM respectfully requests that DEQ reevaluate and correct the listing information taking into account the Hart Crowser Letter, Historical Investigation Report, and below comments.

(1) "solvent mixed with paint leaked from drums onto the surface of the ground"

The February 17, 2000 Hart Crowser Letter provided documentation that this release was cleaned up to a level consistent with Oregon law, and poses no significant threat to present or future human health, safety, welfare or the environment. Therefore, DEQ may not include this release as a basis for the CRL and Inventory listing, and reference to this release should be deleted.

Discovery of the release arose out of an April 15, 1985 compliance inspection conducted jointly by EPA and DEQ. The release occurred at the waste solvent container area where OSM stored waste Methyl Ethyl Ketone ("MEK") in drums on a wood pallet situated on gravel and soil near the paint storage building at Surface Processing. Subsequent to the inspection, OSM conducted a formal closure process under the oversight of EPA and DEQ. Appendix A includes the closure plan for the waste solvent container area, a declaration by a professional engineer regarding the cleanup activities undertaken, and analytical results following soil and gravel removal. After the cleanup, OSM changed its drum handling practices and the sealed drums of waste MEK were placed inside a steel secondary containment pan on a concrete pad.

The statute governing the listing process specifically states that DEQ must exclude from the CRL any releases that DEQ determines have been cleaned up to a level that is consistent with Oregon law, or that "poses no significant threat to present or future public health, safety,

welfare or the environment." ORS 465.405(3). Further, the EQC rules prohibit inclusion of a release that requires no additional investigation or remedial action "to assure protection of present and future public health, safety, welfare, and the environment." OAR 340-122-0073(2)(f). OSM, through a professional engineer and under the oversight of DEQ and EPA, conducted a formal closure process and cleaned up the release consistent with Oregon law. Further, analytical results following the clean up demonstrate that the release "poses no significant threat to present or future public health, safety, welfare or the environment." The release is not a "confirmed release" and cannot be relied upon or included in DEQ's listing decision.

(2) "landfilled large volumes of waste paint on site"

Similarly, OSM requests that DEQ delete the reference to the "landfilled" paint waste. Information regarding the one time disposal of paint waste in an onsite landfill was provided to DEQ in the February 17, 2000 Hart Crowser Letter, as well as the March 2001 Historical Investigation Report. The information demonstrates that OSM closed the landfill and DEQ concluded that the landfill poses no significant threat to human health, safety, welfare or the environment.

In the past, OSM generated paint waste at the Surface Processing facility. In 1986, OSM obtained a permit from DEQ for a one-time disposal of paint waste in an onsite landfill in the northwest section of the facility. (Letter Authorization, Appendix B.) On page 4 of the Site Summary Report, DEQ states that the "Company" "cleaned up a portion of the landfilled paint wastes." In fact, OSM formally closed the landfill in accordance with Oregon law with DEQ oversight.

A landfill characterization report and post-closure quarterly sampling results are on file with the DEQ Solid Waste Section. During the two years of groundwater monitoring, no constituents were detected above drinking water standards or the conditions set forth in the closure permit. Exponent concluded in the Historical Investigation Report that the landfill does not pose a source of any constituents of concern. Further, in a June 23, 1997 letter, DEQ informed OSM that the closure permit could be terminated because "the subject landfill poses no threat to human health or the environment and requires no further solid waste activity." (Appendix B.) Accordingly, under ORS 465.405(3) and OAR 340-122-0073(2)(f), DEQ may not designate the landfill a "confirmed release."

The source of confusion may be that there were paint wastes managed in the ponds to the north and south of the Surface Processing facility. These paint wastes were removed from the ponds, and it is believed this is the source of the paint waste that was deposited in the

landfill. Exponent concluded in the Historical Investigation Report that, based on visual observations, paint residue may remain in the soils in the areas of the former paint waste ponds. For this reason, the former ponds remain a potential source of contaminants at the Site. (Historical Investigation Report, at 12.) DEQ's reference to the "landfilled" paint waste may have been intended to describe these former ponds. If so, OSM requests that DEQ clarify this reference and delete the reference to the landfill.

(3) "deposited emission control dust (determined to be characteristic hazardous waste) into a surface impoundment not intended for that purpose"

The reference to the impoundment should also be deleted. The February 17, 2000 Hart Crowser Letter and the Historical Investigation Report demonstrates that OSM removed all wastes from the surface impoundment, closed the impoundment under the oversight of EPA and DEQ, and there is no information indicating that it poses a significant threat to present or future human health or the environment or requires additional investigation or remedial action.

The impoundment, referred to as the Direct Reduction Division pond (the "DRD pond"), was used from approximately 1969 to 1980. Prior to electric arc furnace ("EAF") dust being listed as a hazardous waste (K061), EAF dust was placed in the DRD pond for a short period of time, from June 1980 until March 1981. The contents of the DRD pond, including the EAF dust, were excavated and sent off-site with EPA and DEQ approval between 1984 and 1986. EPA and DEQ also required OSM to monitor the groundwater for metals for over a two-year period. No substances of concern exceeded the U.S. EPA safe drinking water standards. In 1986, after all the waste had been removed, EPA and DEQ approved backfilling over the empty pond. Based on groundwater monitoring results, there was no evidence that any hazardous constituents were released from the DRD pond, and by 1987 EPA and DEQ determined that the DRD pond was closed as a regulatory concern. (Appendix C.)

Based on the review of this historical information and Exponent's own field investigation as reported in the February 2001 report, Exponent concluded that the DRD pond is not a potential source of contaminants on the Site and recommended that no further investigation is required. (Historical Investigation Report, at 10, 39.) OSM removed the waste, monitored the groundwater for two years, and closed the pond under the oversight of EPA and DEQ. The groundwater monitoring demonstrated no evidence of a release. Thus DEQ has no basis to conclude that the DRD pond requires additional investigation or remedial action to address a significant threat to present or future human health, safety, welfare or the environment. Accordingly, the DRD pond may not be listed as a "confirmed release" pursuant to ORS 465.405(3) and OAR 340-122-0073(2)(f), and OSM requests that DEQ delete the reference to the DRD pond.

(4) "experienced at least 2 PCB spills from leaking capacitors and transformers"

DEQ refers to two PCB spills at the Site, and states that the "Company" "cleaned up the PCB-contaminated soil." This is consistent with OSM's records. However, OSM requests that DEQ clarify that only one of the PCB spills remains a potential source at the Site, and therefore, only one spill may be considered a "confirmed release."

The Historical Investigation Report describes two PCB spills that occurred at OSM, one in 1985 and one in 1982. The historical file documents that the 1985 PCB release was cleaned up consistent with Oregon law and poses no significant threat to present or future human health or the environment. The 1985 spill occurred in the vicinity of the former DRD pond and OSM reported the release to DEQ. A total of sixteen soil samples were analyzed and found to have PCB concentrations. However, the PCB concentrations prior to cleanup activities did not pose unacceptable health risks according to DEQ's 1998 risk assessment guidance. Nevertheless, some of the soil in the spill area was excavated and disposed of offsite. This excavation further reduced any potential for health risks. Accordingly, Exponent concluded that the release is not a source of concern. (Historical Investigation Report, at 11.) The 1985 PCB release cannot be included as a "confirmed release" under ORS 465.405(3) and OAR 340-122-0073(2)(f).

In contrast, the historical file on the 1982 PCB release is not definitive. Although it indicates that OSM cleaned up the release following existing regulatory standards, Exponent concluded that the 1982 release may remain a potential source of PCBs because the historical file is incomplete. (Historical Investigation Report, at 11.)

OSM requests that DEQ clarify the reference to the PCB spills by limiting the listing information to the 1982 PCB spill only, and clarify that the information regarding the spill is not definitive.

3. <u>The Evidence Does Not Meet the Data Quality Requirements</u>

The reported detections of cadmium, chromium, lead, and PCB 1221 do not meet the data quality requirements of OAR 340-122-0073(1)(a). The rules require that DEQ document the release of a hazardous substance by an observation documented by a government agent, a written statement by the owner or operator that the release has occurred, or laboratory data indicating that the substance was detected at levels greater than background levels. OAR 340-122-0073(1)(a). On pages 2 and 3 of the Site Summary Report, DEQ lists detections of cadmium, chromium, and lead in soil based on "laboratory data" from February 2, 2001 and

lists "Landfill" under each of the detections. In addition, DEQ lists a detection of PCB 1221 in soil, with no reference to the evidence or observation date. The Site-Specific Worksheet indicates that the documentation for the confirmed release is "Laboratory data from October 2000, contained in Pre-Remedial Investigation Field Activities report submitted to DEQ February 2, 2001." However, OSM was not able to find these referenced detections in the February 2, 2001 report.

Coincidentally, DEQ's purported detection of PCB 1221 at 7.9 ppm matches one of the soil samples taken in connection with the 1985 PCB spill discussed above. After discovery of the 1985 PCB spill, OSM took sixteen soil samples to define the area and extent of contamination. Of those sixteen samples, 7.9 ppm was the highest level of PCBs detected. However, as discussed above, OSM excavated the heavily contaminated areas in 1985. If this data is the basis for DEQ's detection of 7.9 ppm of PCB 1221, then DEQ must delete this reference because the soil has already been cleaned up consistent with Oregon law and poses no significant threat to present or future human health, safety, welfare or the environment.

OSM's efforts to identify the source of the cadmium, chromium, and lead detections in soil were not successful. OSM reviewed various data, reports, and information regarding previous remedial activities at the Site and could not find any data that matches DEQ's detections. Thus OSM cannot comment on these detections.

Without reliable documentation, neither OSM, nor the public, has any way to verify the data, determine where and when these samples were taken, analyze whether the substances have been addressed, and comment on what relationship, if any, this information has to a "landfill." For these reasons, OSM requests that DEQ evaluate this information to ensure that the reported detections are reliable, reissue the proposal with the documentation required by OAR 340-122-0073(1)(a), and provide OSM with an opportunity to comment on the revised proposal.

4. DEQ Failed to Provide Documentation of the Site Scoring Required for Inventory Listing

Finally, DEQ may not list the Site on the Inventory because it did not provide OSM with the documentation used to calculate the site score in accordance with OAR 340-122-0076(2) and 340-122-0074(3)(a). OSM therefore has not had the opportunity to comment on the site scoring.

D. CONCLUSION

Based on the above, DEQ's proposal to list the Site on the CRL and Inventory does not comply with the statutory requirements for listing. As the agency entrusted with the obligation of providing information to the public, OSM urges DEQ to correct the CRL and Inventory listing information as specified above, and provide OSM with the opportunity to comment on the revised proposal.

If you have any questions regarding the information provided, please do not hesitate to call.

Very truly yours,

Krista I. Born

KIB
Enclosures
cc (w/ encl.): Mr. Andrew Gilpin
Mr. David Livermore
Ms. Laura McWilliams
Ms. Joan Snyder

APPENDIX A

WASTE SOLVENT AREA DOCUMENTATION

Engineers
Planners
Economists
Scientists

August 29, 1985

P8100.43

Oregon Steel Mills
P.O. Box 2760
Portland, Oregon 97208

Attention: Mr. Thomas C. McCue
Environmental Engineering Manager

Gentlemen:

Attached is our declaration to fulfill the requirements of 40 CFR 265.115 and, if applicable, 40 CFR 264.115.

If you have any questions or if we can be of further assistance, please call.

Sincerely,

CH2M HILL NORTHWEST, INC.

Richard G. Crim

Richard G. Crim, P.E.
Geotechnical Engineer

Attachment

CH2M HILL Engineers Planners Economists Scientists

DECLARATION

With respect to the solidified paint waste at the Gilmore Steel Corporation, Oregon Steel Mills Division, in Portland, Oregon, the undersigned declares that, based on his personal observations, review of records, and documentation, and in his professional engineering judgment and opinion and to the best of his knowledge, the following steps described in the attached closure plan have been performed:

1. Container storage equipment has been removed.

2. The soil was tested in a grid pattern at six points.

3. Gravel and soil were removed in the area adjacent to the concrete pad.

4. Sampling was performed after soil and gravel were removed. Based on results from Coffey Laboratories, Inc., Log #A850826-A, all samples tested indicate a concentration of methyl ethyl ketone of less than one part per million.

5. Excavated soil and gravel was placed in drums and manifested for shipment to a permitted hazardous waste landfill.

6. The excavated area was backfilled with clean gravel.

This declaration does not constitute any warranty, express or implied.

REGISTERED PROFESSIONAL ENGINEER 12149 OREGON JULY 15, 1963 RICHARD G. CRIM

Signed,

Richard G. Crim

Richard G. Crim, P.E.

August 29, 1985
Date

CLOSURE PLAN

The following plan meets the requirements of 40 CFR 265 and 264 for the closure of a Container Storage Area and includes the comments submitted by the Oregon Department of Environmental Quality in their August 15, 1985 dated letter.

Coating Department: Container Storage of Methyl Ethyl Ketone (MEK)

Steps:

1. Remove all container storage equipment including empty and/or partially full barrels, pallets, funnels, etc.

2. Test soil in a grid pattern along the west side of the concrete pad at six (6) points.

3. Pending the outcome of the sample analysis, remove sufficient gravel and soil in the area adjacent to the concrete pad to ensure a clean up level to background is achieved.

4. The level of background will be acheived when sample analysis of the soil indicate a Methyl Ethyl Ketone (MEK) concentration of one part per million (1 PPM) or less. This concentration meets or exceeds the level of detection standard in EPA's Analysis Test Method #8015 outlines in EPA publication Test Methods for Evaluating Solid Waste, SW 846, July, 1982.

5. Excavated gravel and soil removed will be placed DOT 17 E Barrels and disposed of in a permitted Hazardous Waste Landfill.

6. The excavated area will be backfilled with clean gravel.

7. The closure will be certified by Gilmore Steel Corporation, Oregon Steel Mills Division and an Independent Registered Professional Engineer as specified in 40 CFR 265.115 and 264.115.

8. Laboratory Analysis will be performed and certified by an outside independent laboratory using the above test method specified by Oregon Department of Environmental Quality.

COFFEY LABORATORIES, INC.
4914 N.E. 122nd Ave.
Portland, OR 97230
Phone: (503) 254-1794

August 26, 1985
Log #A850822-G

Oregon Steel Mills
P.O. Box 2760
Portland, Oregon 97208

Attention: Tom McCue

Analysis Requested: Methyl Ethyl Ketone

Sample ID: Dirt

CLIENT ID	RESULTS
1	< 1.0
2	< 1.0
3	< 1.0
4	3.6
5	< 1.0
6	< 1.0

< denotes "less than"

Results in mg/Kg.

Sincerely,

Susan M. Coffey
President

SMC/gs

COFFEY LABORATORIES, INC.
4914 N.E. 122nd Ave.
Portland, OR 97230
Phone: (503) 254-1794

August 27, 1985
Log #A850826-A
RETEST REPORT

Oregon Steel Mills
P.O. Box 2760
Portland, Oregon 97208

Attention: Tom McCue

Analysis Requested: Methyl Ethyl Ketone

Sample ID: Dirt

CLIENT ID		RESULTS
1		< 1.0
2		< 1.0
3		< 1.0
4	A*	< 1.0
	B**	< 1.0
5		< 1.0
6		< 1.0

< denotes "less than"

Results in mg/Kg.

A* Before Cleanup
B** After Cleanup

Sincerely,

Susan M. Coffey
President

SMC/gs

OREGON STEEL MILLS

P.O. Box 2760
Portland, Oregon 97208
Phone (503) 286-9651

January 29, 1986

Ms. Catherine Massimino
U.S. ENVIRONMENTAL PROTECTION AGENCY
Region 10 M/S 533
1200 Sixth Avenue
Seattle, Washington 98101

Dear Cathy:

Thank you for your telephone call yesterday, reminding me that certain information regarding the closure of a container storage area is due. Enclosed with this letter is a blue print with the waste solvent container area outlined and an informational submittal responding to the five (5) items requested in the Charles E. Finley letter of November 20, 1985.

If further information is needed for your evaluation of the closure, please contact me at (503)286-9651.

Sincerely,

Thomas C. McCue

Thomas C. McCue
Environmental Manager

Enclosure

TCM:jp

ATTACHMENT Z

i. A drawing is enclosed which identifies the Waste Solvent Container Area, Sampling Grid, the Sampling Points, and the location of the soil which was removed.

ii. The Sampling Method was devised to obtain a series of Sampling Points radiating outward from an observed spill of paint and/or Methyl Ethyl Ketone (MEK). The Spill Area was contained by a concrete pad on the east side, therefore, sample points were chosen on the three (3) remaining sides as well as the actual spill point. This sampling method was described as a Sampling Grid consisting of six (6) points in the closure plan submitted to Oregon Department of Environmental Quality and was approved prior to execution.

iii. The sampling procedure was developed to obtain representative samples by:

1. Excavation to a six (6) inch depth at each sample point.

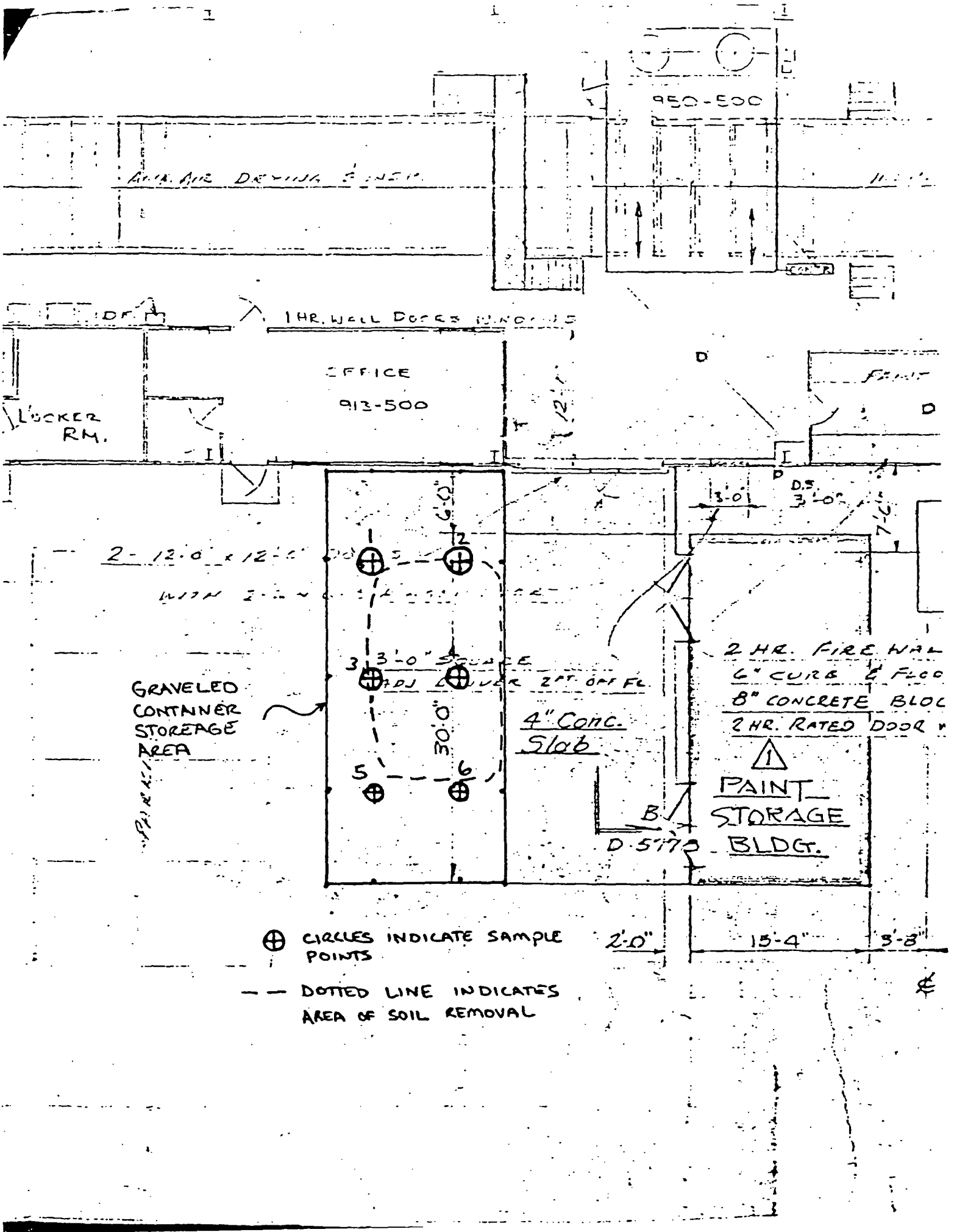
2. Collect soil and gravel samples at each point with a hand trowel.

3. Samples were placed directly into clean clear glass sample bottles and sealed with aluminum foil and screw top lids.

4. The sealed sample bottles were placed into a covered cardboard box for protection from ultraviolet light and transported to Coffey Laboratories to be refrigerated until analyzed.

iv. A Spill Area was observed and sampled according to Section ii above.

v. The Independent Professional Engineer observed each step of the Closure Plan as performed and attested to in the Declaration Document provided to EPA, August 29, 1986. The Independent Professional Engineer was chosen to oversee the closure operation because of his previous experience as a Contract Supervisor overseeing clean up operations for two (2) years for EPA at the Love Canal Site.


950-500
1 HR. WALL DOORS IN NO.
OFFICE
913-500
LOCKER RM.
2-12'-0" x 12'-0"
6'-0"
3'-0" SQUARE
ADJ. COVER 2" OFF FL.
30'-0"
GRAVELED CONTANER STORAGE AREA
4" Conc. Slab
2 HR. FIRE WAL
6" CURB & FLOO
8" CONCRETE BLOC
2 HR. RATED DOOR
1
PAINT STORAGE BLDG.
D.S.
3'-0"
7'-6"
2'-0"
15'-4"
5'-8"
CIRCLES INDICATE SAMPLE POINTS
DOTTED LINE INDICATES AREA OF SOIL REMOVAL

APPENDIX B

WASTE PAINT LANDFILL DOCUMENTATION

OREGON STEEL MILLS

P.O. Box 2760
Portland, Oregon 97208
Phone (503) 286-9651

June 3, 1986

RECEIVED
JUN 5 1986
DEPT. OF ENVIROMENTAL QUALITY

Mr. Edward Woods
Northwest Region
Department of Environmental Quality
P.O. Box 1760
Portland, OR 97207

RE: **One Time Disposal of Solid Waste**

Dear Mr. Woods:

To confirm our previous telephone conversations, we are requesting approval to leave certain solid wastes in place for disposal on-site rather than disposal at the St. John's Landfill. The solid waste is described as paint waste "B" and has been analyzed for total metals, extraction procedure toxicity metals, and methyl ethyl ketone the only significant solvent. Paint waste "A" is the currently produced paint waste and will be handled in a different manner.

We propose a one-time disposal of up to four hundred (400) cubic yards of paint waste "B" on-site. We have disposed of all paint wastes generated since August 1984 in an off-site permitted landfill authorized by a special waste disposal permit as you requested. Due to the quantity and the inert quality of this paint waste material, a one-time disposal approval seems appropriate.

Thank you for your consideration.

Sincerely,

Thomas C McCue

Thomas C. McCue
Environmental Manager

Enclosures

COFFEY LABORATORIES, INC.
4914 N.E. 122nd Ave.
Portland, OR 97230
Phone: (503) 254-1794

May 28, 1986
Log #A860514-B
PO#: 100

Oregon Steel Mills
P.O. Box 2760
Portland, Oregon 97208

Attention: Tom McCue

Analysis Requested: E P Toxicity Test.

Sample ID: #1 - Paint Waste A, 5-13-86
#2 - Paint Waste B, 5-13-86

Sample Description: Paint Waste

Method of Analysis: Federal Register/Vol.45, No.98/Monday, May 19, 1980/ Rules and Regulations; Appendix II, Page 33127

Field Data: Samples were collected and delivered by the Client

ANALYSIS	SAMPLE #1	SAMPLE #2	Limit
Arsenic	< 0.05	< 0.05	5.0
Barium	26.50	3.52	100.0
Cadmium	0.16	0.13	1.0
Chromium	0.48	< 0.05	5.0
Lead	0.51	0.75	5.0
Mercury	< 0.05	< 0.05	0.2
Selenium	< 0.05	< 0.05	1.0
Silver	< 0.05	< 0.05	5.0

< denotes "less than"

Results expressed in mg/liter unless otherwise specified.

REPORT CONTINUES

This report is for the sole and exclusive use of the above client. Samples are retained a maximum of 15 days from the date of this letter.

COFFEY LABORATORIES, INC.
4914 N.E. 122nd Ave.
Portland, OR 97230
Phone: (503) 254-1794

May 28, 1986
Log #A860514-B
PO#: 100

Oregon Steel Mills
Page Two
Attention: Tom McCue

Analysis Requested: Total Metals

Sample ID: #1 - Paint Waste A, 5-13-86
#2 - Paint Waste B, 5-13-86

Sample Description: Paint Waste

ANALYSIS	SAMPLE #1	SAMPLE #2
Arsenic	< 10.00	< 10.00
Barium	761.2	3754
Cadmium	6.77	27.64
Chromium	1532	915.3
Lead	190.9	552.6
Mercury	< 0.05	< 0.05
Selenium	< 0.05	< 0.05
Silver	< 5.0	< 5.0
Methyl Ethyl Ketone*	14	1.4

Results in mg/kg

< denotes "less than"

* Analysis by extraction GC/FID and comparison with solutions of standards.

Sincerely,

Susan M. Coffey
President

SMC/gs

This report is for the sole and exclusive use of the above client. Samples are retained a maximum of 15 days from the date of this letter.

VICTOR ATIYEH
Governor

Department of Environmental Quality

522 S.W. FIFTH AVENUE, BOX 1760, PORTLAND, OREGON 97207 PHONE: (503) 229-5696

June 23, 1986

Mr. Thomas C. McCue
Oregon Steel Mills
P. O. Box 2760
Portland, OR 97208

Re: Multnomah Co. - SW
LETTER AUTHORIZATION #A-184

Dear Mr. McCue:

This is in response to your request for a one time permit to put paint wastes in an existing landfill on your plant site. Your analysis of the paint wastes indicates that those wastes do not meet the definitions of hazardous wastes. Therefore, the Department hereby authorizes the disposal of the paint wastes on site subject to the following conditions:

1. The wastes shall be added to the existing landfill on your plant site.

2. The wastes added to the landfill should be the paint wastes characterized by the test results submitted with your request.

3. The amount of wastes shall not exceed 400 cubic yards.

4. At least 2 feet of cover shall be installed over the waste piles.

5. The wastes shall not be deposited at levels lower than the existing water table.

6. This authorization expires 6 months from the date of this letter.

If you have any questions, please contact me at 229-5296.

Sincerely,

Edward G. Woods
Senior Environmental Analyst
Northwest Region

EGW:m
SM350
cc: Solid Waste Section

J-3317-01

HART CROWSER INC.

JUN 25 1997

Portland Office

Oregon

DEPARTMENT OF ENVIRONMENTAL QUALITY

Western Region - Salem Office

Andrew J. Gilpin
Manager, Environmental Services
Portland Steelworks
Oregon Steel Mills, Inc.
P.O. Box 2760
Portland, OR 97208-0363

JUNE 23, 1997

Re: Solid Waste Landfill
SW Permit No. 1174
Multnomah County

Dear Mr. Gilpin:

This is in response to Hart Crowser's letter on your behalf of April 30, 1997, requesting that Solid Waste Disposal Site Closure Permit No. 1174 be terminated.

Enclosed is an evaluation of the request by Fred Bromfeld, of my staff. His determination is that pursuant to OAR 340-95-050(5), the permit may be terminated as the subject landfill poses no threat to human health or the environment and requires no further solid waste activity.

As such, Solid Waste Disposal Site Closure Permit No. 1174 is hereby terminated.

Sincerely,

Charles W. Donaldson
Manager, Solid Waste Permits
Northwest Region

cc: Fred Bromfeld, NWR
Herb Clough, Hart Crowser

750 Front St. NE
Suite 120
Salem, OR 97310
(503) 378-8240
(503) 378-3684 TDD
DEQ/WVR-101 1-91

PERMIT TERMINATION REPORT

OREGON STEEL MILLS, INC.
P.O. BOX 2760
PORTLAND, OR 97321

Report By: Fred Bromfeld

Prepared: June 23, 1997

SW LANDFILL
SW PERMIT NO. 1174
MULTNOMAH COUNTY

By an April 14, 1997, letter from its consultant, Oregon Steel Mills requested that the Department terminate the permit for the closed landfill at its Rivergate mill.

Background

The landfill is small and in a remote corner of the mill site. It was permitted on July 31, 1995, several years after its last use, at the request of Oregon Steel and to enable the Department to monitor the impact of the landfill on groundwater. Attachment 1 gives more complete background.

Evaluation

A review of an April 29, 1997, report of 9 sampling events, indicated a slight, though statistically significant increase in arsenic, iron, and manganese in the shallow groundwater beneath the landfill. But, given the landfill's location [groundwater] downstream of most of the mill facilities, its impact on the already impacted groundwater is not deemed to be significant. As such, further monitoring is unwarranted.

I also inspected the landfill site on June 19, 1997. The top cover is 18" compacted aggregate and appears unchanged from its condition at closure. Oregon Steel uses it as a storage area.

Recommendation

It is recommended that the permit be terminated as provided by OAR 340-95-050(5) since the site poses no threat to human health or the environment and:

1. There is no need for active supervision of the site.

2. There is no need for maintenance at the site.

3. There is no need for the maintenance or operation of any system or facility at the site.

Attachment

Attachment 1

PERMIT EVALUATION REPORT

OREGON STEEL MILLS, INC.
P.O. BOX 2760
PORTLAND, OR 97321

SW LANDFILL
SW PERMIT NO. 1174
MULTNOMAH COUNTY

Report By: Fred Bromfeld
Nancy Sawka

Prepared: May 15, 1995
Revised: July 3, 1995

Background

Oregon Steel Mills, Inc. (OSM) operates a steel mill that manufactures carbon steel from scrap and additives in an electric arc furnace. The mill is located on the eastern bank of the Willamette River in the Rivergate industrial area of north Portland, Oregon.

The subject 3 acre landfill is located in the northwest corner of the mill property about 100 feet from the Willamette River. The landfill was operated between 1975 and 1990 but this is the initial permit since the disposed wastes were considered inert and exempt from regulation during the time of its operation.

The disposed wastes are primarily mullite (a clay), ceramic refractory, furnace slag, and mill scale. In a September 30, 1992, RCRA Preliminary Assessment, EPA determined the landfill to be a solid waste management unit.

Cover Evaluation

On January 19, 1995, OSM submitted an application to the Department requesting that the landfill be closed under a closure permit. Also received were a Landfill Site Characterization, July 2, 1993, and a Landfill Closure Plan, April 3, 1995, Revised May 10, 1995.

The plan for the landfill cover is satisfactory and is incorporated into the permit.

Groundwater Evaluation

An extensive amount of waste and groundwater characterization work has been completed at this facility as part of the RCRA Preliminary Assessment (PA), the landfill site characterization study (SCS), and for the closure plan. In addition to the process waste discussed above, a one-time disposal of non-hazardous paint wastes was allowed in the landfill sometime after June 1986.

These paint wastes tested as non-hazardous, but contained sufficient concentrations of some trace metals to be viewed as a potential environmental concern should leaching of the wastes occur.

The groundwater flow at the site is towards the Willamette River. The potential receptors of a leachate release, should one occur, are the groundwaters beneath and downgradient of the landfill, and the Willamette River to the west.

The landfill has an existing monitoring well network consisting of two downgradient wells, one upgradient well, and one cross gradient well. These wells were installed as part of the SCS. Waste characterization data and groundwater analytical results presented in the SCS and closure reports, indicate that the main constituents of concern are trace metals including arsenic, barium, cadmium, chromium, lead, nickel, and zinc. Most of these constituents were detected in the wastes and/or the groundwater. The metals in the groundwater were not detected above the federal or state standard, but most did exceed the concentrations found in the upgradient well.

The permit requires quarterly groundwater monitoring of the existing monitoring wells for the constituents of concern. With the completion of closure activities, the potential for leachate generation and release should be minimized. After two years of quarterly groundwater monitoring, the site should be re-evaluated to determine if the closure efforts have been effective in reducing the concentrations of metals in the groundwater. VOC and semi-VOC analyses are not included in the groundwater monitoring requirements of the permit because these constituents are not expected to pose an environmental threat based on the data collected to date. However, VOCs and semi-VOCs should be sampled by the DEQ laboratory during the first split sampling event to confirm the previous groundwater sampling results.

A water well inventory is also required in the permit since a detailed survey was not completed or provided in previous reports.

The permit was put on public review June 1, 1995. No comments were received.

Recommendation

It is recommended that the draft permit be issued as proposed.

Mark FYI
DREW

Oregon

DEPARTMENT OF
ENVIRONMENTAL
QUALITY

Western Region -
Salem Office

JAN 3 0 1996

Andrew J. Gilpin
Manager, Environmental Services
Oregon Steel Mills, Inc.
P.O. Box 2760
Portland, OR 97208-0363

Re: Solid Waste Landfill
SW Permit No. 1174
Multnomah County

Dear Mr. Gilpin:

We have reviewed and accept the Landfill Closure Construction Report, November 30, 1995, as the construction certification required by OAR 340-93-150. Based on the certification we consider the landfill to be closed.

The construction report was very well presented.

If you have any questions, please call Fred Bromfeld, of my staff, at tel: 229-6210, Portland.

Sincerely,

Charles W. Donaldson
Manager, Solid Waste Permits
Northwest Region

cc: Fred Bromfeld, NWR
Herb Clough, Hart Crowser

OSM011811

750 Front St. NE
Suite 120
Salem, OR 97310
(503) 378-8240
(503) 378-3684 TTY

APPENDIX C

DRD POND DOCUMENTATION

OREGON STEEL MILLS

P.O. Box 2760
Portland, Oregon 97208-2760
Phone (503) 286-9651

September 3, 1999

Mr. Charles Clinton
Manager, Hazardous Waste Technical Assistance and Compliance
Oregon Department of Environmental Quality
Northwest Region
2020 SW Fourth Avenue, Suite 400
Portland, OR 97201-4987

Re: Closure of Issues Related to Former DRD Pond

Dear Chuck:

This letter is in response to your inquiry about the final resolution/closure of the former Direct Reduction Division ("DRD") storage pond located at the Oregon Steel Mills' ("OSM") facility. I apologize for the delay in getting back to you, the former DRD pond has a long (and at this point, dated) history and it took some time locating the relevant documents.

It appears from my review of the files that the regulatory issues associated with the DRD pond were the subject of discussions between Gilmore Steel Mills ("Gilmore") (now OSM), the U.S. Environmental Protection Agency ("EPA"), and the Oregon Department of Environmental Quality ("DEQ") from 1980 until 1987. By 1987, after Gilmore had removed all the material from the DRD pond, and had demonstrated through sampling and analysis that the DRD pond was not a source of potential contamination, both EPA and DEQ considered the issue closed. Below I have provided you a brief narrative of the history and resolution of the DRD pond. I have also enclosed relevant documents and correspondence relating to the DRD pond.

As you may recall, Gilmore used the former DRD pond for many years for storing iron ore used in the manufacture of steel. For a short period of time, from approximately June 1980 until March 1981, Gilmore placed electric arc furnace dust ("EAF") into the DRD pond. At about this same time, the EPA promulgated regulations under the Resource Conservation and Recovery Act ("RCRA") defining emission control dust from the electric furnace production of steel as a listed hazardous waste. The listing of K061 as a hazardous waste began what turned out to be a long and often convoluted series of discussions about the regulation and appropriate management of the material located in the pond.

For purposes of your inquiry about the ultimate resolution of the matter, I will skip a significant portion of the early DRD pond history and instead, focus on describing how the

resolution and closure of the former DRD pond was achieved. In chronological order, important milestones relating to the pond closure are as follows:

1. In March 1983, EPA and the Oregon Department of Environmental Quality ("DEQ") conducted a joint inspection of the Gilmore facility. The inspection report prepared by DEQ did not identify any violations at the facility, and stated that once the EAF dust was removed from the DRD storage facility, Gilmore would not be considered a treatment, storage, and disposal ("TSD") facility.

2. Between May 7, and May 10, 1984, Gilmore removed the EAF dust, the K061 listed waste, from the pond (a total of approximately 413 tons), and manifested it to the RCRA-permitted Subtitle C disposal site in Arlington, Oregon.

3. In July 1985, EPA determined that the materials remaining in the DRD pond (iron ore) would not be considered a solid waste under EPA's recycling rules if 75 percent of the iron ore remaining in the pond was removed and recycled by December 31, 1985.

4. Beginning in July 1984, Gilmore conducted groundwater monitoring in the area surrounding the DRD pond and submitted the results to EPA. All of groundwater monitoring data from 1984 through 1986 show that no substances of concern exceeded EPA's safe drinking water standards.

5. In November 1985, EPA wrote a letter to Gilmore stating that EPA had concluded that there was no evidence that any hazardous constituents had been released from the DRD pond. EPA also stated in this letter that Gilmore was not required to have either interim TSD status or a RCRA permit, or to file a closure plan, with respect to the DRD pond and that the DRD pond did not present any further RCRA issues.

6. On October 29, 1986, consistent with EPA's conclusions regarding the DRD pond, DEQ wrote Gilmore granting its permission to proceed with the leveling of the site and to discontinue groundwater monitoring because all of the iron ore materials had been removed and because the analytical data on the materials removed from the DRD pond demonstrated that the material did not contain any hazardous constituents of concern.

In sum, by 1987, both EPA and DEQ had determined that the former DRD pond was administratively closed as a regulatory concern based on the removal actions performed by Gilmore and Oregon Steel and based upon confirmation sampling of the former DRD pond and of the groundwater underneath the former DRD pond, both indicating that the former pond had not been a source of a release of hazardous substances.

As recently as August 1992, an EPA contractor conducted a RCRA Preliminary Assessment of the Gilmore facility. Although the EPA contractor identified the former DRD pond as a solid waste management unit, it recommended no further investigation or action with respect to the former DRD pond.

I have enclosed for your files the following documents:

1. Memorandum from the Director of Environmental Quality Commission ("EQC") to EQC regarding Agenda Item K for the January 31, 1986, EQC Meeting- "Request for Variance from Gilmore (Oregon) Steel from Classification as Solid Waste Certain Iron Ore Material." Attachments 1 through 4 to Agenda Item K.

2. Letter dated May 7, 1985, from Thomas C. McCue, Environmental Manager, for OSM, to Kenneth D. Feigner, Chief, Waste Management Branch of the EPA regarding Groundwater Data Submittal transmitting the fourth submittal of Groundwater Analysis and the Groundwater Elevation Data for all 15 well points.

3. Letter dated September 9, 1985, from Mr. McCue to Mr. Feigner transmitting the second submittal of Groundwater Analysis and the Groundwater Elevation Data.

4. Letter dated November 20, 1985, from Charles E. Findley, Director, Hazardous Waste Division, EPA, to Thomas B. Boklund, President, Gilmore in response to Gilmore's letters of August 29, and September 30, 1985, as to the handling of the DRD pond material.

5. Interoffice Memo dated July 1, 1986, from Brett McKnight of DEQ to File thru Neil Mullane regarding HW CEI Inspection Review.

6. Letter dated July 29, 1985, from Mr. Feigner of EPA to Mr. McCue of Gilmore regarding a follow-up to meeting held on June 4, 1985, and major issue being the redefinition of solid waste promulgated by EPA on January 4, 1985, on the past and present hazardous waste activities at Gilmore's Portland, Oregon, facility.

7. Letter dated July 23, 1986, from Mr. McCue to Mr. Feigner transmitting the fifth submittal of Groundwater Analysis and Groundwater Elevation Data (not included).

8. Letter dated July 30, 1986, from Mr. McCue to Ms. Gillaspie regarding documentation of iron ore removal for recycling or reuse.

9. Letter dated August 28, 1986, from Richard C. Bird, Manager, Process Engineering, OSM, to Ms. Gillaspie regarding removal of all of the material in the DRD Ore Storage Facility from our property for recycling.

10. Letter dated October 13, 1986, from Mr. Bird to Chuck Rice of EPA regarding request to terminate monitoring pursuant to the Consent Order entered into on February 8, 1985.

11. Letter dated October 22, 1986, from D. Henry Elsen, Assistant Regional Counsel, EPA, to Marvin B. Durning, counsel for Gilmore, in response to his letter of September 29, 1986, and OSM's letter of October 13, 1986, to Charles Rice of EPA regarding activities at the DRD ore storage/disposal unit at its Portland, Oregon, facility.

12. Letter dated October 23, 1986, from Mr. Bird to Mr. Rice regarding removal of last few cubic yards of iron ore from the Ore Storage Facility and placed it in with the small amount of material at the rail head which is being shipped to a cement manufacturer for recycling into cement and request for prompt approval to push in the dykes, etc. as per letter of October 13, 1986.

13. Letter dated October 29, 1986, from Edward Woods, Senior Environmental Analyst, Northwest Region, DEQ, to Mr. Bird regarding confirmation of all material having been removed and permission to level the storage facility and discontinue groundwater monitoring program.

14. Letter dated December 18, 1987, from Mr. Bird to Ms. Gillaspie regarding removal of all iron ore and shipment to Canada Cement LaFarge, Ltd., or to Ash Grove Cement West, Inc., for use in the manufacture of cement.

15. Letter dated September 30, 1992, from Kathryn Gladden, Work Assignment Manager, Science Applications International Corporation, to Deborah Robinson of EPA transmitting final RCRA Preliminary Assessment report along with page 23 of that report.

OSM has considered the former DRD pond a closed issue for many years. I trust this letter and the accompanying enclosures allow you to close your file on this issue too.

Please call me if you have any questions regarding the former DRD pond.

Sincerely,
OREGON STEEL MILLS, INC.

ANDREW J GILPIN
Manager, Environmental Services
Portland Steelworks

AJG:P-S:d-r

Enclosures

Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND OR 97207

522 SOUTHWEST 5th AVENUE, PORTLAND OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item K , January 31, 1986, EQC Meeting

Request for Variance from Gilmore (Oregon) Steel from Classification as Solid Waste Certain Iron Ore Material

Background

Gilmore Steel operates a steel rolling mill in the Rivergate district of north Portland. The facility is also known as Oregon Steel.

The company combines scrap iron and various alloys to produce steel. The mill was built in 1970. The company had used an impoundment to store iron oxide ore. The iron ore pond is about 310 feet by 390 feet and 19 feet deep, and is located south of the main mill, adjacent to the Willamette River. To control air pollution, the company uses a baghouse.

In May of 1980, the company started using recycled scrap iron to replace iron ore in its steel making process. This caused some contaminants from scrap iron (lead, cadmium and chromium) to be generated in the steel making process. The contaminants were collected in the baghouse. The baghouse dust was deposited in the iron ore storage pond from May of 1980 until March, 1981.

Under current state and federal Resource Conservation & Recovery Act (RCRA) hazardous waste regulations, baghouse dust from the primary production of steel in electric furnaces is a listed waste (#K061, Emission Control Dust/Sludge).

Disagreements between EPA, DEQ and Gilmore Steel over the proper regulatory handling of the material in the iron ore pond delayed disposition of the material for several years.

A regulatory light-through-the-tunnel appeared with EPA's revision of the hazardous waste rules to exclude legitimate recycling or reuse from hazardous waste regulations. EPA promulgated these rules January 4, 1985; they were adopted by reference by the Environmental Quality Commission on

PETITION BEFORE THE STATE OF OREGON
DEPARTMENT OF ENVIRONMENTAL QUALITY

Subject: Petition by Gilmore Steel Corporation to exclude a material (assumed to be a waste for purposes of the petition) at its Oregon Steel Mill Rivergate facility from status as a hazardous waste under the Oregon Hazardous Waste Management Program.

Introduction

Gilmore Steel Corporation petitions the Oregon Department of Environmental Quality (DEQ) to exclude from status as a hazardous waste, a mixture of iron ore and emission control dust now found in the asphaltic lined iron ore storage facility at its Rivergate plant in Portland, Oregon. The material is 99.92% iron oxides by weight and 0.08% other metals (lead 0.076%, cadmium 0.002%).

Gilmore Steel believes that the material is not a waste at all but is a mixture of a raw material and a by-product of manufacturing which is beneficially reuseable. This petition is presented out of an abundance of caution and to cooperate with regulatory authorities as far as possible. For purposes of this petition, Gilmore Steel, therefore, asks that DEQ assume the material to be subject to its hazardous waste management program and grant this petition to remove it from that status.

By this petition, and Oregon's interim authorization it is requested and understood that the action of the Environmental Quality Commission will be pursuant to both the Oregon and federal hazardous waste management programs. With this understanding, the petition refers only to the Oregon program.

OBJECTIVE

The purpose of this petition, requesting exclusion of materials which are currently in the ore storage pond from the Oregon Hazardous Waste Management Program at Gilmore Steel Corporation, is to demonstrate under OAR 340-101-003 (5)- (a) & (b) that the mixture of these materials no longer exhibits the characteristics of a hazardous waste as defined in OAR 340-101-Subdivision C. Subsequent to original EP toxicity submittals and interpretation by EPA on the characteristics of these materials, substantial quantities of the emission control dust have been removed and disposed of at Chem Securities System Inc.'s Class 1 landfill in Arlington, OR.

The technical basis for this petition has been developed from the collection and analysis of unbiased randomly distributed samples, which show that the material no longer exhibits EP Toxicity (per OAR340-101-024), and is not, therefore by definition, a hazardous waste. The remainder of this petition is organized in a one-to-one correspondence with the OAR 340-100-020 & 022 requests for information to justify the exclusion of this material.

PETITION BEFORE THE STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

SUBJECT: REQUEST BY GILMORE STEEL CORPORATION FOR THE DECLASSIFICATION OF MIXTURE CONTAINING HAZARDOUS CONSTITUENTS.

Gilmore Steel Corporation requests the Oregon Department of Environmental Quality Quality (DEQ) to exclude from regulation a mixture of iron ore and emission control dust from the secondary production of steel by the Electric Arc Process (EAF dust). The exclusion is requested on the basis that the mixture is not characteristic of a waste, is not a listed waste, and is exempted because it is a mixture of a raw material and a reusable by-product. No new material is being added to the stored material and the use and re-use of the material is dependent upon declassification of the mixture.

OAR 340-100-020 (2)

(a) Gilmore Steel Corp
Oregon Steel Mills Division
14400 N. Rivergate Blvd.
Portland, OR 97203

(b) Oregon Steel Mills (OSM) is owner and operator of an iron ore storage facility consisting of an asphaltic lined pond containing 47,610 tons of iron ore and oxide of iron. Within this mixture are minimal amounts of metal oxides of lead and cadmium which may therefore be subject to Oregon and federal hazardous waste regulations. However, at this time, it is in the interest of OSM to remove these process materials for recycling to a steel making facility to allow for other use of the land.

(c) To facilitate this plan, Oregon Steel Mills proposes that the ODEQ approve this petition to exclude the contents of the ore storage facility from status as a hazardous waste under the Oregon hazardous waste management program, because chemical analyses show that the mixture is not a characteristic waste as defined in OAR Sub Division D of Division 101 (340-101).

SUGGESTED STAFF/COMMISSION WORDING

"It is the opinion of the (staff/commission) that the material contained within the asphaltic lined storage facility at the Oregon Steel Mill's property of Gilmore Steel does not meet the pertinent criteria set out in OAR 340-101-003 for classification as a hazardous waste and is excluded from the provisions of the Oregon Hazardous Waste Management Programs.

The (staff/commission) believes that the samples collected were nonbiased and adequately represent any variations which may occur in the waste petitioned for exclusion.

The (staff/commission) has also reviewed the groundwater data and leachate collection analysis data submitted in this petition and submitted separately and found no migration of hazardous constituents into the groundwater or environment from this storage facility. In addition, the (staff/commission) has reviewed the petitioned material by the Vertical and Horizontal Spread (VHS) model developed by EPA and proposed in the Federal Register/Vol.50, No. 38/Tuesday, February 26, 1985/pages 7896-7900. This analytical model assumes a reasonable worst case land disposal scenario including generation of a leachate, migration of the leachate to an underlying groundwater aquifer and migration of the contaminated groundwater aquifer to a nearby drinking water well.

If these materials were to be disposed of in an offsite landfill, the VHS model predicts the potential of hazardous constituents to migrate from the landfill. The (staff/commission) has found that, based on the VHS model, the potential for contaminant migration at a 95% confidence interval for lead, cadmium, and chromium would not exceed the primary drinking water standards for those constituents at the nearest reception well (per EPA, reception well is chosen to be 500 feet away).

The (staff/commission) believes that the material contained in the asphaltic lined storage facility is non-hazardous for all reasons, and, as such, should be excluded from hazardous waste control."

Resolution:

The Environmental Quality Commission of the State of Oregon hereby grants the petition of the Gilmore Steel corporation and excludes from status as a hazardous waste under the Oregon Hazardous Waste Management Program the approximately 47,610 tons of material in the ore storage facility at Gilmore Steel's Rivergate, Portland facility as more particularly described in this petition.

OAR 340-100-020 (2) Continued

d) The proposed declassification (delisting) is required to facilitate recycle of these materials by removal from the site. OSM requests that the petition should be approved on the basis that the mixture is not hazardous and passes all required testing methods for hazardous classification (OAR 340-101). The declassification (delisting) petition should also be approved on the basis that the mixture poses no threat to public health or the environment. Even though the mixture is not, as noted above, a characteristic waste, the approval of the petition will allow for its complete removal from the site.

The following evidence is offered in support of this petition.

(1) Extraction Procedure Toxic Test Method Results

ELEMENT	OSM MIXTURE*, mg/l	OAR/EPA STD, mg/l
ARSENIC	< 0.05	5.0
BARIUM	0.39	100.0
CADMIUM	0.43**	1.0
CHROMIUM	< 0.05**	5.0
LEAD	4.21**	5.0
MERCURY	< 0.05	0.2
SELENIUM	< 0.05	1.0
SILVER	< 0.05	5.0

* OSM mixture results from a weighted composite resulting from 25 full depth core samples selected on the basis of a computer based statistically random selection program. The OSM mixture falls below the standards set by the Environmental Protection Agency and adopted by the State of Oregon for classification as a hazardous material.

** Elements of concern for classification as a hazardous material.

(2) At the demand of EPA, groundwater monitoring test results were completed for three down-gradient wells. All analyses showed compliance with the requirements of OAR 340-105 Subpart F, as an example, Data for well OSM-2 are shown below:

ELEMENT		OSM 2 Sampling Run	EPA Primary Drinking Water Std
ARSENIC		0.005	0.05
BARIUM	<	0.1	1.0
CADMIUM	<	0.001	0.01
CHROMIUM	<	0.001	0.05
FLORIDE		0.8	1.4-2.4
LEAD	<	0.01	0.05
MERCURY	<	0.001	0.002
NITRATE	<	0.05	10.0
SELENIUM	<	0.005	0.01
SILVER	<	0.002	0.05
ENDRIN	<	0.02	0.0002
LINDANE	<	0.02	0.004
METHOXYCHLOR	<	0.5	0.1
TOXAPHENE	<	1.	0.005
2,4-D	<	1.	0.1
2,4,5-TP SILVEX	<	1.	0.01
RADIUM		-	5 pCi/l
GROSS ALPHA		-	15 pCi/l
GROSS BETA		-	4 MREM/yr.

* OSM-2 A down-gradient well located at the waste containment boundary.

< Less than the detection limit of the analytical method.

** Representative data for three quarterly analyses run to date. (July, Oct, Dec 84)

___ Indicates that these are EPA priority pollutants.

The ground water monitoring results from this down-gradient well along with 18 additional ground water monitoring well samples all meet or exceed the Environmental Protection Agency and State of Oregon primary drinking water standards, which indicates that the contents of the ore pond have been fully contained by the asphaltic liner.

(3) Run-on/Run-off water (collected within the pond) test results from 19 Nov 84.

ELEMENT	OSM Sample mg/l	EPA Primary & Secondary Drinking Water Std mg/l
ARSENIC	< 0.025	0.050
BARIUM	0.02	1.0
CADMIUM	0.0019	0.010
CHROMIUM	< 0.01	0.050
FLORIDE	4.93	1.4-2.4
LEAD	< 0.001	0.050
MERCURY	< 0.0005	0.002
NITRATE	0.13	10.0
SELENIUM	< 0.001	0.010
SILVER	0.0016	0.050
IRON	0.08	0.3
MANGANESE	0.004	0.05

The run-on/run-off water collected within the lined storage facility meet or exceed the EPA and ODEQ primary drinking water standards with the exception of fluoride. Although the drinking water standard for fluoride is exceeded, it is not listed as a hazardous constituent of the iron ore mixture by EPA or ODEQ standards supported in section (1) above, and this water is fully treated and reused within the steel making process. Fluoride is not released from the facility into any drinking waters of the State.

(9) (a) Coffey Laboratories Inc.
4914 N.E. 122nd. Ave.
Portland, Oregon 97230
Phone: (503) 254-1794

(9) (b) Sampling and Testing - Personnel Description
Resumes for the pertinent personnel may be found in Appendix A.

(1) All samples were collected by Thomas C. McCue, Environmental Engineering Manager for Gilmore Steel Corp.
B.S. Degree in Science, Oregon State University
Continuing Education includes graduate work and seminars in various environmental areas.
Experience includes seven (7) years as an Environmental Engineer, and six (6) years as an Analytical Chemist.

(2) All samples were prepared by Traci L. Trotman, Spectroscopist for Coffey Laboratories
B.S. Degree in Science, Portland State University
Experience includes five (5) years laboratory experience.

(3) All samples were analyzed by Harland B. Haynie, Director of Research and Development for Coffey Laboratories.
B.A. Degree in Math, Whitman College
B.A. Degree in Physics, Whitman College
Experience includes seven (7) years as a nuclear engineer USN, four (4) years lecturing in physics and biochemistry, and four (4) years laboratory experience.

(4) All sample preparation and analysis was supervised by Susan M. Coffey, President of Coffey Laboratories
B.S. Degree in Microbiology, Oregon State University
Graduate course work in Environmental Chemistry and Biochemistry.
Experience includes over ten (10) years as a laboratory chemist.

(b) (5) Consulting Engineer - Dr. Larry L. Russell
President of Russell Environmental Engineering and Development.
Ph.D - Sanitary Engineering, University of California at Berkeley
M.S., B.S. - Civil Engineering, University of California at Berkeley
Experience includes over 15 years as an expert in Environmental Chemistry and Waste Management.

(c) All sampling was performed between December 10-14, 1984.
All samples collected were submitted to Coffey Laboratories for analysis December 14, 1984.
Testing of samples was completed in stages between January 9, 1985 and March 1, 1985. All analyses will be found in Appendix B.

(d) Generating Facility:
Gilmore Steel Corp.
Oregon Steel Mills Division
14400 N. Rivergate Blvd.
Portland, OR 97203

(e) Process Description.
Recycled scrap iron and lime are charged into a water cooled, refractory lined melting vessel or furnace. The iron and lime are melted by passing electric current through the scrap iron at a rate of 520 kw/ton via three graphite electrodes. The electrodes are consumed in the process at a rate of 11 lbs/ton molten steel producing CO and CO_2 gases. The gas mixture in turn provide the transport media for the metal oxide fume and particulates generated by the melting process.

As the scrap iron melts the lime fluxes with the impurities contained in the scrap and floats them to the top forming a foamy slag. Once the slag building process is complete the slag can be drawn off (slag-off) and the remaining "clean" steel can be chemically and metallurgically adjusted with ferro alloys. When the design chemistries are met, the steel is tapped and poured into slabs awaiting final rolling into finished plate.

Raw Materials Used in the Steel Making Process:

Recycled Scrap Iron	
Lime	Iron Ore
Ferrochromium	Ferrovanadium
Copper	
Ferromanganese	
Nickel	

By-Product of the Steel Making Process

Slag
Condensed Metal Oxides and Lime Dust

All steel by-products have been analyzed and evaluated against standards for listed and characteristic wastes. Only the condensed metal oxides found in the emission control dust failed the extraction procedure toxicity test. All other by-products were found non-hazardous.

Emission Control Dust Formation

During the meltdown process the electric arc from the graphite electrodes vaporizes a small amount of the scrap iron at the contact interface creating vapor phase metal fumes. In addition to the arc interface fumes other vapor phase metal fumes are released as the molten bath builds. The first to form are low melting point metals, such as lead and cadmium, which flash off early in the meltdown phase due to their respectively low partial pressures. The mixture of vapor phase metals are carried out of the furnace with the carbon monoxide (CO) formed by the graphite electrodes.

Combustion air is added to the gas mixture immediately after leaving the furnace to oxidize the CO to CO_2. The gas mixture is then cooled by passing thru water cooled duct sections within the fume collection system. As the gas mixture cools, metal oxides condense out of the gas stream to form submicron particulates. The higher melting point metals, such as iron, condense first, providing a nucleus of condensation for the lower melting point metals. The fine particulate formations tend to be somewhat charged depending on the degree of gas ionization (e.g., free vaporized metal vs. oxidized metal) and will therefore agglomerate into larger particles up to 100 microns as they pass thru the gas stream.

Electron micrographs show agglomerations of small spherical particles in large randomly attached masses similar to a crystal growth. They also show spherical growth of agglomerated particles with an outer layer binding them together much like the peel of an orange. Chemical analysis of these agglomerated particles indicate the outer layer to consist of lower melting point metals such as lead cadmium and zinc. The spherical, two component particle is found early in the meltdown cycle, whereas the randomly agglomerated particles are found towards the end of the melt period. This further demonstrates the early flash off of low melting point metals and ultimate condensation of other higher melting point particulate. For a more indepth explanation of steel emission control dust formation see Appendix D.

(f) Ore Storage Facility Content Description -

(composite sample from 25 core samples)

Parameter	Weight (not intended to total 100%)
ARSENIC	< 0.01
BARIUM	0.00108
CADMIUM	0.00203
CHROMIUM	< 0.01
LEAD	0.074
MERCURY	< 0.009
SELENIUM	< 0.009
SILVER	0.0004
IRON	41.0
MANGANESE	0.121
MAGNESIUM	0.255
VANADIUM	0.0013
CALCIUM	1.12
COPPER	0.0215
ZINC	0.496
ALUMINUM	0.266
SODIUM	0.0177
TIN	< 0.001
NICKEL	0.00167
TITANIUM	0.0135
STRONTIUM	0.00141
SILICA	2.07
MOISTURE	7.61
TOTAL	53.1%

The remaining weight is thought to be oxygen and a small amount of residual material which could not be dissolved. No further production of this material occurs because the material to be declassified is a mixture of emission control dust metal oxides (mostly iron oxide) and iron ore.

(g) BASIS FOR LISTING AS A HAZARDOUS WASTE

SEE APPENDIX E.

OAR 340-100-022 Continued

(h) SAMPLING METHOD

Description

The sampling method was developed in an effort to obtain statistically valid samples which accurately describe the entire contents of the ore storage area. This objective proved difficult due to the variation in sample density and moisture content. The ore storage area traps rain water within the asphaltic liner which mixes with the iron ore and EAF dust to maintain a 6 to 30% moisture content. The variation in moisture content made some areas so soft that safety equipment was required to prevent sinking. Other areas of the storage area were so hard that core samples required predrilling to loosen compacted layers. Photographs of the sampling procedures may be found in Appendix C.

After attempting three different core sampling methods an Oakfield core sampler was chosen.(Photo P-1) The Oakfield sampler consisted of a hollow sample probe, open on the side, with hardened cutting tip.(Photo P-2) Thirty (30) inch extensions and a tee handle could be attached to the hollow sample probe allowing the probe to be pushed into the ore.

Since a continuous core sample was needed to depths as deep as thirteen (13) feet, a sample casing was needed. The casing consisted of three sections of one inch conduit which could be threaded together.(Photo p-3) The sample casing insured that all core samples obtained from the Oakfield sampler came from precisely the same column of soil extending from the surface to the asphaltic liner.

A sampling grid was set up to accurately locate sample points. The grid consisted of a ten (10) by eleven (11) matrix of 110 sample points accurately positioned with a standard surveyors transit.-(Photo P-4,5) Twenty-five (25) sample points were picked from the sampling grid by a computer based statistically random selection program run on an IBM PC XT computer.(Table T-1 Appendix D) The computer selected points were plotted on the sample grid and full depth core samples were taken from these points.

Procedure

A sampling station was set up at each sample point to minimize sample contamination.(Photo P-6) A clean paper work surface was used to set out all samples and sampling equipment. All equipment was cleaned between sample stations to prevent cross-contamination. After equipment set-up the sample casing was advanced into the sample media using a slide hammer.(Photo P-7,-8) Care was taken not to advance the casing more than one foot before sampling to prevent compacting within the casing. The Oakfield core sampling probe was then pushed down the casing, retrieving the core section.(Photo P-9) The core section was placed into a clean one quart jar and the process was repeated by advancing the casing and resampling until contact with the asphaltic bottom occurred.(Photos P-10-11-12) When a full depth core sample was obtained the sample jar was sealed with a gasketed screw top lid, labeled and placed into a box for shipment to the lab.(Photo P-13). Finally all sample data was recored including sample number, location, and depth of the core.(Photo P-14)

(i) Sampling handling and preparation

All samples were collected in clean, clear glass, 1 quart bottles with screw top lid containing a vinyl seal. Both the lid and bottle were labeled with a sample identification number and recorded on the field data sheet. All filled sample bottles were placed back into the original shipping carton for transport to the laboratory. All samples were taken directly to the laboratory and logged in by the quality control methods specified in the QA/QC manual found in Appendix F.

(1) Scope of Work: LABORATORY INSTRUCTIONS

A series of 25 core samples were obtained from an iron ore pile. Due to the height of the pile the samples take from one to three containers each and are labeled A,B,C respectively. You will find a total of 42 containers which make up the 25 core samples.

Analysis

25	EP toxicity	-	one EP tox on each core sample
1	EP toxicity	-	one EP tox on the composite sample
		-	the composite sample to be weighed up by Coffey Labs to provide mass balanced composite. (See Example provided)
1	EP toxicity	-	EAF dust composite (6% Pb)
28	Quantitative	-	Full Quantitative analysis on all core samples and composite samples.

2 Primary Drinking Water Analysis	-	Analyze both water samples for Primary Drinking Water Standards. Emphasis will be on metals.
1 pH & Buffering Capacity	-	EAF dust composite report the pH of EAF dust in distilled water and the amount of acid used in the EP tox test.

MASS BALANCE FORMULA for the preparation of the composite sample:

$$\frac{\text{SAMPLE GROSS WT. - TARE WT.}}{\text{TOTAL SAMPLE WT.}} = \text{COMPONENT WT. OF SAMPLE IN COMPOSITE}$$

Reports - Prepare reports separately on the following categories of analysis:

1. EP toxicity analysis of the 25 core samples and the composite sample.

2. EAF dust report including EP tox, Quantitative analysis, pH (H_2O) and buffering capacity.

3. Quantitative analysis report of all 25 core samples and the composite sample.

4. Primary drinking water analysis report of both water samples.

OAR 340-100-022 (1) Continued

FIELD SAMPLE DATA

Sample	Location	Depth	Sample	Location	Depth
1	3	7.0'	16	62	5.5'
2	8A	12.25'	17	66	3.0' *
3	8B	13.25'	18	74	4.25'
4	11	13.0'	19	76	5.25'
5	18	8.0'	20	83A	3.5
6	19	9.0'	21	83B	3.5'
7	29	4.5'	22	87	5.5'
8	30	10.0'	23	98	5.5'
9	36	6.5'	24	99	6.0'
10	38	7.0'	25	101	4.5'
11	47	6.0'			
12	49	9.25'			
13	50	10.25'			
14	51	8.25'			
15	61	7.5'			

* Unable to sample full depth - expected depth 5.5'

(j) DESCRIPTION OF TESTS PERFORMED

The extraction technique follows the EP toxicity test procedures specified in:

> Federal Register/Vol. 45, No. 98/ Monday,May 19, 1980/Rules and Regulations; Appendix II, page 33127.

The digestion method for total metal analysis follows the ASTM microwave digestion procedure.

(k) INSTRUMENTATION

(a) EP toxicity extractions were analyzed on the following instruments:

(1.) Perkin-Elmer Model 5000 Atomic Absorption Spectrophotometer with autosampler, graphite furnace, and hydride attachments.

(2.) Varian AA-575 Atomic Absorption Spectrophotometer with vapor generation attachments was used for Mercury analysis only.

(b) Total metal digestions were analyzed on;

Perkin-Elmer Model 6000 Inductively Coupled Plasma (ICP) with auto sampler, peristaltic pump, and purge attachments.

OAR 340-100-022 Continued

(1) CERTIFICATION

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

SIGNED THIS _____ DAY OF _____ 1985

_____

Thomas C. McCue

Environmental Engineering Manager

Gilmore Steel Corporation

Attachment 1
Agenda Item K
1/21/86 EQC Meeting

OREGON STEEL MILLS

DIVISION OF GILMORE STEEL CORPORATION
P.O. BOX 2760 • PORTLAND, OREGON 97208
TELEPHONE (503) 286-9651
TWX: 910 464 1549

December 20, 1985

Fred Hansen, Director
Oregon Department of Environmental
Quality
P.O. Box 1760
Portland, OR 97207

RE: **Gilmore Steel Corporation (OSM) - Petition for Variance from Classification as a Solid Waste**

Dear Mr. Hansen:

Gilmore Steel Corporation hereby petitions the Director of Oregon Department of Environmental Quality (and the Oregon Environmental Quality Commission) to grant a variance until December 31, 1986 from classifying certain iron ore material as a solid waste by virtue of being accumulated speculatively without sufficient amounts being recycled or transferred for offsite recycling. Although Gilmore Steel will ship the material as soon as feasible, we cannot now know when the transportation problem will be solved.

Background. The material in question is certain iron ore material (iron ore, ore fines, and emission control dust) in the DRD ore storage facility at our Rivergate Plant. As you know, material has been held at our plant for recycling, either at our plant or to be sold and shipped offsite for use as an ingredient in making a product, and both DEQ and EPA Region 10 have concurred that if so sold and transferred, without being reclaimed or speculatively accumulated, the material is not a solid waste (and hence not a hazardous waste). (See letter of Kenneth D. Feigner, EPA Region 10, to Thomas C. McCue, Gilmore Steel dated July 29, 1985 with copies to DEQ.)

Gilmore Steel Corporation sold the material to a cement manufacturing company in Canada for use as an ingredient in making ferro cement and arranged transportation by barge. It will all be used in the cement, nothing will be reclaimed. Four barges, each of about 12,000 tons capacity were contemplated to load and depart in the month of December 1985. The first barge, carrying about 12,034 tons departed December 14, 1985 but experienced difficulty at sea. We are told by the barge company that the load shifted and caused the barge to list dangerously. Fortunately, however, the barge did arrive safely at Vancouver, B.C. The second barge is at the loading pier, but the barge company has placed a hold on further loading of shipments until it investigates the problem and determines the suitability of its barges for the loads. Gilmore Steel is working with the barge company on the problem and has contacted other barge companies for bids and time schedules. Because of these unforeseen, temporary, and uncontrollable circumstances, Gilmore Steel may not be able to complete the transfer offsite of 75% or more of the material for shipment to the purchaser by December 31, 1985.

(4) Handling to minimize loss. The material is handled carefully to minimize loss. It is all valuable material. The method of transfer is by truck to a bulk loading facility in the Rivergate Industrial area for loading into the barges for carriage to the purchaser's plant site in Canada.

(5) Other relevant factors. As you know, Gilmore Steel Corporation believes none of the material is hazardous waste by virtue of other criteria, and, at most, the emission control dust could be hazardous waste. (The emission control dust is still iron oxide, but with traces of lead, cadmium and chrome. These traces are absent form the other material.) Out of an abundance of caution, however, Gilmore Steel Corporation makes this request for a variance.

Your attention to this matter and the help of your staff is greatly appreciated. In the interest of time, if further information is needed, please call Tom McCue, Environmental Manager, at 286-9651.

Sincerely,

Thomas B. Boklund
President

TBB:dr

cc: Kenneth Feigner
Chief, Hazardous Waste Branch
U.S. EPA, Region 10

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Attachment 2
Agenda Item K
1/31/86 EQC Meeting

NOV 20 1985

M/S 533

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Thomas B. Boklund, President
Gilmore Steel Corporation
P.O. Box 2766
Portland, Oregon 97208

Dear Mr. Boklund:

This is in response to Gilmore Steel Corporation's (Gilmore) letters of August 29 and September 30, 1985. For your convenience, I have structured this letter to correspond to the format used in your letters. These responses are all based on the assumption that Gilmore will handle the material in the DRD pond in such a manner that it does not meet the definition of a solid waste under §261.2(e)(1), as long as Gilmore did not accumulate speculatively and could document its claim that the materials are not solid wastes or are conditionally exempt from regulations set out in §261.2(f).

A. The Environmental Protection Agency's (EPA) letters dated February 28, 1985, and July 30, 1985: We agree that the information on past practices under 3004(u) of the Resource Conservation and Recovery Act (RCRA) 1984 amendments is not required. Based on EPA's review of Gilmore's responses to these letters on April 2 and September 30, 1985, we have found no evidence that there has been any release of a hazardous waste or hazardous constituent to the environment from the facility.

B. EPA's letter of July 18, 1985: We agree that the Exposure Information Report under the RCRA amendments is not required.

C. EPA's letter of July 29, 1985:

1. DRD Ore Storage facility: We agree that Gilmore does not require interim status, nor a RCRA permit, nor a closure plan, with respect to the DRD Ore Storage facility. Gilmore should also be aware if the K061 dust that is stored in the pond were to escape from the unit (i.e., toxic contaminants were to leach from the waste and contaminate groundwater), this would constitute disposal and meet the definition of abandoned, and thus would be defined as a solid waste. Since the material would also be a hazardous waste, the material leaking from the unit would be subject to the hazardous wastes rules.

SURNAME							
DATE	MB:C.Massimino;cm;IT/8/85;4547 GC Hofer Rice Feigner				11/8/85		

EPA Form 1320-1 (12-70)

OFFICIAL FILE COPY

[redacted] letter of August 7, 1985: We agree that Gilmore's [redacted] facility is not a land disposal facility.

The above information is being requested pursuant to Section 3007 of RCRA. Your response should be directed to Catherine Massimino at the letterhead address within 45 days of your receipt of this letter. Failure to respond to a Section 3007 request could subject Gilmore to enforcement action including monetary penalties.

Please direct any further questions on this matter to Catherine Massimino of my staff at (206) 442-4153.

Sincerely,

/s/ Charles E. Findley

Charles E. Findley, Director
Hazardous Waste Division

[redacted]

cc: Michael Gearheard, EPA
Michael Downs, DEQ

bcc: A. Whitson, EPA
C. Massimino, EPA
Janet Gilespie, DEQ

[redacted]

Agenda Item K
1/31/86, EQC Meeting

December 9, 1985

TO: File

FROM: Dick Bird

SUBJ: Telephone Call To Brian Acton

I talked to Brian Acton of Pacific Basin Coal & Carbon in Canada this afternoon and he passed on to me that LaFarge wants the 4th barge of iron ore material.

This then will empty the DRD storage pond of all iron ore and will raise the total quantity to ship to approximately 47,000 tons.

LaFarge will issue a purchase order change to cover the additional material on the 4th barge when our transportation problems are solved.

The necessity for the 4th barge was caused by the high moisture content in the iron ore.

DATE Nov. 29, 1985 NO. 18386 H.

PLEASE SHOW THIS NUMBER O
CORRESPONDENCE INVOICES
ING SLIPS AND BILLS OF LADING
INVOICE IN TRIPLIC

LINE NO.	QUANTITY	DESCRIPTION	UNIT PRICE	AMOU
1		Price Adjustments		
2		a) Iron Content - if the average Fe content		
3		(dry basis) of the material shipped is		
4		less than 65.0% by weight (dry basis), the		
5		$16.09 US per short ton (dry basis) price		
6		will be lowered in proportion as the per-		
7		centage Fe content is to 65.0%.		
8		eg. Average Fe content is 64.0% (dry basis)		
9		Price is adjusted as follows:		
10		$\frac{64.0}{65.0} = .98$		
11				
12		Price (dry basis) = 1609 x .98 = $15.77		
13		This price is now subject to the moisture		
		adjustment as per (b).		

...../3

TO THE VENDOR

OREGON STEEL MILLS

DATE Nov. 29, 1985. NO. 18386 H.

PLEASE SHOW THIS NUMBER ON CORRESPONDENCE INVOICES ING SLIPS AND BILLS OF LADING
INVOICE IN TRIPLIC

SHIPPING INSTRUCTIONS

LINE NO.	BILL CODE	QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
1			Weight Determination: The weight of material		
2			purchased will be determined in the loaded barges		
3			at Portland Oregon by a licensed marine surveyor and		
4			will constitute the basis of OSM invoices to C.C.L.		
5			If disputed, the parties will discuss and reach a		
6			mutually acceptable conclusion.		
7					
8			Payment Terms:		
9			a) Up Front Payment: C.C.L. agrees to pay $30,000 US		
10			on completion of unloading first barge.		
			b) Deferred Payments: The balance of the first ship-		
12			ment as well as all subsequent barge shipments		
13			will be paid for by C.C.L. to OSM based on C.C.L.'s		

actual monthly usage of the iron ore material. The price of the material will be calculated upon arrival of the three barges and after adjustments for iron content and moisture.

...../5

PLEASE SHOW THIS NUMBER ON CORRESPONDENCE, INVOICES, SHIPPING SLIPS AND BILLS OF LADING
INVOICE IN TRIPLI

	DESCRIPTION	UNIT PRICE	AMO.
	c) C.C.L. anticipates but does not guarantee using 4,000 short tons per year of the OSM iron ore material or an average of 333 tons per month.		
	Effect of Permanent Closure of Richmond Plant: The parties have no expectation at this time of permanent closure of the Richmond plant, but recognize that use of the materials by C.C.L. in making cement will stretch out over a number of years. In the event that C.C.L.'s Richmond plant is permanently shut down before all the material has been used, C.C.L. will have no further obligation for any additional payments for the material remaining unused and title to this remaining unused material shall revert to OSM. OSM will have a reasonable time, which shall be not less than two years, to resell the material and transfer if off C.C.L.'s plant site or make other arrangements. OSM will not be required to pay to C.C.L. any rent, storage charge, insurance, or any other fees, costs, or rebates of any kind in connection with the reversion of title of the material and its presence on C.C.L's sites during the reasonable period and OSM will have the right itself or through its agents to enter C.C.L.'s property as appropriate to carry out the sales or other arrangements for the material. If title to any of the material shall revert to OSM as a result of the permanent closure of C.C.L.'s Richmond plant,		

...../7

Attachment 4
Agenda Item K
1/31/86 EQC Meeting

THE OREGONIAN, WEDNESDAY, JANUARY 1, 1986

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OREGON STEEL MILLS

PO Box 2760
Portland, Oregon 97208
Phone (503) 286-9651

May 7, 1985

Kenneth D. Feigner, Chief
Waste Management Branch (M/S 533)
U.S. ENVIRONMENTAL PROTECTION AGENCY
1200 Sixth Avenue
Seattle, Washington 98101

Re: Gilmore Steel Corporation
Groundwater Data Submittal

Dear Mr. Feigner:

Enclosed you will find the fourth submittal of Groundwater Analysis as specified in the Partial Consent Agreement and Final Order filed with EPA February 11, 1985. The data represents the fourth consecutive quarter analysis for Well #9. Also enclosed are the Groundwater Elevation Data for all fifteen (15) well points. If you have any questions regarding the data, you may contact me at (503)286-9651.

Please note the contamination in the transfer blank, upon review of the sampling procedures it was found that the sampler had a tear in one (1) of the rubber gloves. However, no contamination was found in the ground water sample.

Sincerely,

Thomas C. McCue

Thomas C. McCue
Environmental Manager

TCM/jp
Enclosure
cc: R.C. Bird
M.B. Durning
J.A. Gillaspie
File

OREGON STEEL MILLS
Div. of Gilmore Steel Corporation
Hydrologic Measurements

Well #	Measuring Point Elevation	Depth To Water	Ground Water Elevation
GS-1	34.82	11.90	22.92
GS-2	32.89	10.19	22.70
GS-3	34.87	11.57	23.30
GS-4	35.18	12.46	22.72
GS-5	34.24	23.06	11.18
GS-6	34.58	7.99	26.59
GS-7	40.29	17.93	22.36
GS-8	40.09	17.38	22.71
GS-9	40.00	17.39	22.61
GS-10	40.18	17.49	22.69
GS-11	34.02	11.39	22.63
GH-1	35.23	11.86	22.37
GH-2	34.80	11.85	22.95
GH-3	31.90	DRY	---
GH-4	35.23	12.51	22.72

Laucks
Testing Laboratories, Inc.
940 South Harney St., Seattle, Washington 98108 (206)767-5060

Certificate

Chemistry, Microbiology and Technical Services

CLIENT: Oregon Steel Mills
P.O. Box 2760
Portland, OR 97208
ATTN: Tom McCue

LABORATORY NO. 95019

DATE: Feb. 19, 1986

P.O. #51545

REPORT ON: WATER

SAMPLE IDENTIFICATION: Submitted 1/30/86 and identified as shown below:

TESTS PERFORMED AND RESULTS:
1) OSM GS-9 JP/PC 1/28/86 1200
2) OSM TB JP/PC 1/29/86 0800

Note: Where samples were submitted and analyzed in quadruplicate, these replicates are indicated by the designations a, b, c and d.

	1a	1b	1c	1d
pH, glass electrode @ 25 C	7.5	7.5	7.5	7.5
Specific Conductivity, micromhos/cm @ 25 C	250.	230.	230.	230.
Total Organic Carbon, parts per million (mg/L)	24.	35.	24.	25.
Total Organic Halogens as Cl, parts per million (mg/L)	L/0.02	L/0.02	L/0.02	L/0.02

This report is submitted for the exclusive use of the person, partnership, or corporation to whom it is addressed. Subsequent use of the name of this company or any member of its staff in connection with the advertising or sale of any product or process will be granted only on contract. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.

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Testing Laboratories, Inc.
940 South Harney St. Seattle Washington 98108 (206)767-5060

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Chemistry Microbiology and Technical Services

Oregon Steel Mills

LABORATORY NO. 95019

	2a	2b	2c	2d
pH, glass electrode @ 25 C	6.2	6.2	6.2	6.1
Specific Conductivity, micromhos/cm @ 25 C	L/5.	L/5.	L/5.	L/5.
Total Organic Carbon, parts per million (mg/L)	9.8	23.	5.6	110.
Total Organic Halogens as Cl, parts per million (mg/L)	L/0.02	L/0.02	L/0.02	L/0.02

	Method Blank a	Method Blank b	Method Blank c	Method Blank d
Total Organic Carbon, parts per million (mg/L)	L/0.1	---	L/0.1	---
Total Organic Halogens as Cl, parts per million (mg/L)	L/0.02	L/0.02	L/0.02	L/0.02

	1	2
Turbidity, Nephelometer units	2.0	0.5
Color, units	60.0	L/5.

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940 South Harney St. Seattle Washington 98108 (206)767-5060

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Chemistry Microbiology and Technical Services

Oregon Steel Mills

LABORATORY NO. 95019

parts per million (mg/L)

	1	2	Method Blank
Total Phenol	0.070	L/0.005	L/0.005
Total Kjeldahl Nitrogen	1.1	L/0.5	L/0.5
Alkalinity as CaCO3	86.	L/1.	L/1.
Arsenic	0.048	L/0.005	L/0.005
Barium	L/0.02	L/0.02	L/0.02
Cadmium	L/0.002	L/0.002	L/0.002
Chromium	L/0.005	L/0.005	L/0.005
Iron	1.8	0.02	0.03
Lead	L/0.01	L/0.01	L/0.01
Manganese	0.42	L/0.002	L/0.002
Mercury	L/0.001	L/0.001	L/0.001
Selenium	L/0.005	L/0.005	L/0.005
Silver	L/0.002	L/0.002	L/0.002
Fluoride	6.5	L/0.1	L/0.1
Nitrate as N	L/0.05	L/0.05	L/0.05
Chloride	8.	L/1.	L/1.
Total Hardness as CaCO3	37.	5.	L/1.
Sulfate as SO4	7.	L/1.	L/1.
Sodium	36.	L/1.	L/1.

parts per billion (ug/L)

	1	2
Endrin	L/0.05	L/0.05
Lindane	L/0.05	L/0.05
Methoxychlor	L/0.1	L/0.1
Toxaphene	L/5.0	L/5.0
2,4-D	L/0.8	L/0.8
2,4,5-TP	L/0.4	L/0.4

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Laucks
Testing Laboratories, Inc.
940 South Harney St. Seattle Washington 98108 (206)767-5060

Certificate

Chemistry Microbiology and Technical Services

Oregon Steel Mills

LABORATORY NO. 95019

Key

L/ indicates "less than"

Respectfully submitted,

Laucks Testing Laboratories, Inc.

J.M. Owens

JMD:br

This report is submitted for the exclusive use of the person, partnership, or corporation to whom it is addressed. Subsequent use of the name of this company or any member of its staff in connection with the advertising or sale of any product or process will be granted only on contract. This company accepts no responsibility except for the due performance of inspection and/or analyses in good faith and according to the rules of the trade and of science.

Laucks
Testing Laboratories, Inc.
940 South Harney St. Seattle Washington 98108 (206)767-5060

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Chemistry Microbiology and Technical Services

Oregon Steel Mills

LABORATORY NO. 95019

APPENDIX

Surrogate Recovery Quality Control Report

Listed below are surrogate (chemically similar) compounds utilized in the analysis of volatile and organic compounds. The surrogates are added to every sample prior extraction and analysis to monitor for matrix effects, purging efficiency, and sample processing errors. The control limits represent the 95% confidence interval established in our laboratory through repetitive analysis of these sample types.

parts per billion (ug/L)

Sample No.	Surrogate Compound	Spike Level	Spike Found	% Recovery	Control Limit
Pesticides					
Method Blank	Isodrin	0.500	0.251	50.2	43-118
1	Isodrin	0.510	0.218	42.7	43-118
2	Isodrin	0.515	0.252	48.9	43-118
Herbicides					
Method Blank	2,4,5-T	0.667	0.381	57.1	28-128
1	2,4,5-T	0.667	0.479	71.8	28-128
2	2,4,5-T	0.667	0.399	59.8	28-128

This report is submitted for the exclusive use of the person, partnership, or corporation to whom it is addressed. Subsequent use of the name of this company or any member of its staff in connection with the advertising or sale of any product or process will be granted only on contract. This company accepts no responsibility except for the due performance of inspection and/or analyses in good faith and according to the rules of the trade and of science.

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 SIXTH AVENUE
SEATTLE, WASHINGTON 98101

DEC 3 1985

NOV 20 1985

REPLY TO ATTN OF: M/S 533

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Thomas B. Boklund, President
Gilmore Steel Corporation
P.O. Box 2760
Portland, Oregon 97208

Dear Mr. Boklund:

This is in response to Gilmore Steel Corporation's (Gilmore) letters of August 29 and September 30, 1985. For your convenience, I have structured this letter to correspond to the format used in your letters. These responses are all based on the assumption that Gilmore will handle the material in the DRD pond in such a manner that it does not meet the definition of a solid waste under §261.2(e)(i), as long as Gilmore did not accumulate speculatively and could document its claim that the materials are not solid wastes or are conditionally exempt from regulations set out in §261.2(f).

A. The Environmental Protection Agency's (EPA) letters dated February 28, 1985, and July 30, 1985: We agree that the information on past practices under 3004(u) of the Resource Conservation and Recovery Act (RCRA) 1984 amendments is not required. Based on EPA's review of Gilmore's responses to these letters on April 2 and September 30, 1985, we have found no evidence that there has been any release of a hazardous waste or hazardous constituent to the environment from the facility.

B. EPA's letter of July 18, 1985: We agree that the Exposure Information Report under the RCRA amendments is not required.

C. EPA's letter of July 29, 1985:

1. DRD Ore Storage facility: We agree that Gilmore does not require interim status, nor a RCRA permit, nor a closure plan, with respect to the DRD Ore Storage facility. Gilmore should also be aware if the K061 dust that is stored in the pond were to escape from the unit (i.e., toxic contaminants were to leach from the waste and contaminate groundwater), this would constitute disposal and meet the definition of abandoned, and thus would be defined as a solid waste. Since the material would also be a hazardous waste, the material leaking from the unit would be subject to the hazardous wastes rules.

2. Cooling Pond: We agree that the cooling pond does not require a RCRA permit as a hazardous waste management unit due to the placement of the ponded water from the DRD pond into it.

3. Baghouse Dust Loading Facility: Based on the documentation provided on production and offsite shipment of the electric arc furnace (EAF) emission control dust, it does not appear that the EAF dust was accumulated in the railcars over ninety days prior to shipment and consequently would not require a RCRA permit.

4. Waste Solvent Container Area: Based on the analytical data and certifications provided and subject to EPA's evaluation of the information identified in items i-v below, it appears that the waste solvent storage area was adequately closed and would not require a RCRA permit. Gilmore is requested to submit the information identified in items i-v below, to enable EPA to perform this evaluation.

i. Drawing depicting the grid which was set up, the location of the sample points and the location of the soil which was removed.

ii. Methodology utilized to choose the number, quantity, and location of samples to assure that they were representative.

iii. Procedures utilized to obtain samples and quality assurance/quality control procedures followed for sampling.

iv. Was there evidence of spills and were these areas sampled?

v. Milestones at which the Independent Professional Engineer inspected the facility to support his certification.

Your request that the RCRA Part B application deadline be extended to the end of the public comment period for the closure plan of the Waste Solvent Container area, is granted.

You should be aware that any solidification of hazardous waste would be considered treatment and require a RCRA permit. Under §260.10, treatment is defined as "any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste, or so to recover energy or material resources from the waste, or so as to render such waste non-hazardous, or less hazardous; safer to transport, store, or dispose of; amenable for storage, or reduced in volume."

D. EPA's letter of August 7, 1985: We agree that Gilmore's facility is not a land disposal facility.

The above information is being requested pursuant to Section 3007 of RCRA. Your response should be directed to Catherine Massimino at the letterhead address within 45 days of your receipt of this letter. Failure to respond to a Section 3007 request could subject Gilmore to enforcement action including monetary penalties.

Please direct any further questions on this matter to Catherine Massimino of my staff at (206) 442-4153.

Sincerely,

Charles E. Findley, Director
Hazardous Waste Division

cc: Michael Gearheard, EPA
Michael Downs, DEQ

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 SIXTH AVENUE
SEATTLE, WASHINGTON 98101

JUL [illegible] 1985

RECEIVED
AUG [illegible] 1985

REPLY TO
ATTN OF: M/S 533

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Thomas C. McCue
Environmental Manager
Gilmore Steel Corporation
P.O. Box 2760
Portland, Oregon 97208

Dear Mr. McCue:

This letter is in follow-up to the meeting held on June 4, 1985, at U.S. Environmental Protection Agency (EPA) Region 10's Seattle, Washington office. Representatives of EPA, Gilmore Steel Corporation (Gilmore) and Oregon Department of Environmental Quality (DEQ) were in attendance at the meeting. The major issue of discussion at the meeting was the impact of the redefinition of solid waste promulgated by EPA on January 4, 1985, on the past and present hazardous waste activities at Gilmore's Portland, Oregon facility. At the close of the meeting, EPA Region 10 committed to consult with EPA Headquarters and prepare a response to the following questions which were raised:

1. If Gilmore removed the contents (iron ore and K061 baghouse dust) from its Direct Reduction Division (DRD) pond and sent it to another firm that would use it to make steel, would the contents of the DRD pond not be considered a solid waste based on §261.2(e), "...Materials that are not solid waste when recycled. (1) Materials are not solid wastes when they can be shown to be recycled by being: (i) Used or reused as ingredients in an industrial process to make a product, provided the materials are being reclaimed..."

2. If Gilmore removed the contents from its DRD pond and fed it back into their own furnace for making steel would the contents of the DRD pond not be considered a solid waste based on §261.2(e)(1)(i) or §261.2(e)(1)(iii), "...Returned to the original process from which they are generated, without first being reclaimed. The material must be returned as a substitute for raw material feedstock, and the process must use raw materials as principal feedstocks."

3. If Gilmore fed the K061 baghouse dust it is currently generating back into its furnace to make steel, would it qualify as not a solid waste based on §261.2(e)(1)(i) or §261.2(e)(1)(iii).

4. If Gilmore sent the K061 baghouse dust it is currently generating offsite to a firm that would use it to make steel would it qualify as not a solid waste based on §261.2(e)(1)(i).

5. If Gilmore briquetted the baghouse dust it is currently producing or the contents of the DRD pond, would it effect the materials qualification potential as not a solid waste based on §261.2(e)(1)(i) or §261.2(e)(1)(iii).

6. At what point would a material be able to qualify as not a solid waste under §261.2(e)(1), from the point of generation or at the point of recycling.

7. Could Oregon under its current status of Phase I authorization of the RCRA hazardous waste regulatory program promulgate the redefinition of solid waste and have it be effective or would it require an EPA approval as a modification to their Phase I authorization, or would it require Oregon to have received Final authorization.

The responses to these questions can be found below numbered as per above questions:

1. Yes, the contents of DRD pond would qualify as not a solid waste under those circumstances based on §261.2(e)(1)(i), as long as the contents of the pond is not "accumulated speculatively." As specified under §261.1(c)(8):

> ...material is not 'accumulated speculatively' if the person accumulating it can show that the material is potentially recyclable and has a feasible means of being recycled; and that--during the calendar year (commencing on January 1)--the amount of material that is recycled or transfered to a different site for recycling, equals at least 75 percent by weight or volume of the amount of that material accumulated at the beginning of the period.

The first time period which would be looked at for this calculation would be from January 1, 1985, to January 1, 1986.

2. & 3. The contents of the DRD pond and the K061 baghouse dust would only qualify as not a solid waste under those circumstances based on §261.(e)(1)(i) and only as long as the material is not "accumulated speculatively." §261.2(e)(1)(ii) is not applicable because the prinicipal feedstocks used by Gilmore for producing steel are not virgin raw materials.

4. Yes the K061 baghouse dust would qualify as not a solid waste under those circumstances based on §261.2(e)(1)(i) as long as the material is not "accumulated speculatively."

5. Briquetting the K061 baghouse dust or the contents of the DRD pond would not effect that materials qualification potential as not a solid waste based on §261.2(e)(1)(i) or §261.2(e)(1)(iii) because it is not a form of reclamation.

6. Materials would be able to qualify as not a solid waste under §261.2(e)(1) from the point of generation on.

7. If Oregon adopts the redefinition of solid waste as part of their Phase I authorized RCRA hazardous waste regulatory program, no pre-EPA approval would be necessary for it to be effective in Oregon. It should also be clearly understood that unless Oregon adopts the redefinition of solid waste it will not go into effect in Oregon.

If Gilmore did handle the material in the DRD pond or the K061 baghouse dust in a manner which would qualify it as not a solid waste under §261.2(e)(1)(i), Gilmore must also be prepared to comply with §261.2(f) "...Documentation of claims that materials are not solid wastes or are conditionally exempt from regulation..."

Gilmore should not construe the qualification of the contents of the DRD pond as not a solid waste as relieving Gilmore of its responsibilities to submit a complete Part B application to EPA by September 4, 1985, as specified in EPA's April 17, 1985, dated letter. Under a closure scenario, this would require the submittal of a closure plan, post-closure requirements (if applicable) and financial assurances as specified under 40 CFR Parts 264 and 270.

Please direct any further questions on this matter to Catherine Massimino of my staff at (206) 442-4153.

Sincerely,

Kenneth D. Feigner, Chief
Waste Management Branch

cc: Michael Gearheard, EPA
Rich Reiter, DEQ
Michael Downs, DEQ

OREGON STEEL MILLS

P.O. Box 2760
Portland, Oregon 97208
Phone (503) 286-9651

July 23, 1986

Kenneth D. Feigner, Chief
Waste Management Branch (M/S 533)
U.S. ENVIRONMENTAL PROTECTION AGENCY
1200 Sixth Avenue
Seattle, Washington 98101

Re: Gilmore Steel Corporation
Groundwater Data Submittal

Dear Mr. Feigner:

Enclosed you will find the fifth submittal of Groundwater Analysis as specified in the Partial Consent Agreement and Final Order filed with EPA February 11, 1985. This submittal, as all previous submittals shows no groundwater contamination. Also enclosed are the Groundwater Elevation Data for thirteen (13) of the fifteen (15) well points. Elevation point GH-3 has been removed due to excavation of iron ore material from the storage facility. Elevation point GS-7 was not accessible due to a mechanical problem with the well cap. If you have any questions regarding the data, you may contact me at (503)286-9651.

Sincerely,

Thomas C. McCue

Thomas C. McCue
Environmental Manager

TCM/jp
Enclosure
cc: R.C. Bird
M.B. Durning
J.A. Gillaspie
File

OREGON STEEL MILLS

P.O Box 2760
Portland, Oregon 97208
Phone (503) 286-9651

July 30, 1986

Janet A. Gillaspie
Manager, Northwest Region
Department of Environmental Quality
P.O. Box 1760
Portland, OR 97207

RE: Documentation of Iron Ore Removal for Recycling or Reuse

Dear Ms. Gillaspie:

During the month of July, the fifth, sixth and seventh barges containing iron ore were shipped to Canada Cement LaFarge, LTD. for use as an ingredient in the manufacture of cement. The total amount of iron ore shipped to date is 56,717.55 short tons and was documented by licensed marine surveyor as follows:

Barge #	Date Loading Complete	Amount Shipped
1	12-7-85	12,034.3 ST
2	3-28-86	11,276.5
3	6-2-86	7,102.3
4	6-18-86	2,317.1
5	7-1-86	7,815.6
6	7-13-86	8,001.15
7	7-25-86	8,170.6
		56,717.55 Short Tons

The amount of iron ore remaining on site is difficult to estimate with precision. By volume there appears to be approximately 10 percent of the original amount remaining. By weight we could have between 8 and 15 percent remaining depending on the densities of the remaining materials. In any case, we have removed for recycle or reuse more than "75 percent by weight or volume of the amount of that material accumulated at the beginning of the period" by the terms of the variance granted until July 31, 1986 (CFR Part 261.1 [c][6]).

Included for documentation is a copy of the contract with Canada Cement LaFarge LTD., and copies of the marine surveyor weight certificates on each barge shipped. If you have any questions, contact either Dick Bird or Tom McCue at (503) 286-9651.

Sincerely,

Tom McCue

Tom McCue
Environmental Manager

cc: Marvin Durning, Durning, Webster & Lonnquist
Kenneth Feigner, EPA - Region 10
Dick Bird, Oregon Steel Mills

WALTER O. HAINES & CO.
Marine Surveyors • Cargo Surveyors and Appraisers • Inspections

Board of Trade Bldg., Suite 555
310 S.W. 4th Avenue
Portland, Oregon 97204

July 11, 1986

Mr. Fred Swanson
Oregon Steel Mills
P.O. Box 2760
Portland, OR 97208

Re: Barge "MLC-331" - Loaded June 30 thru July 1, 1986
Our Report No. 86-381

Dear Fred,

When we did the initial survey on the "MLC-331" this date we discovered an error in the first survey which was submitted on July 1, 1986.

When entering the tables on the initial cut of that survey we mixed long and short tons. Therefore, we submit the following figures as an addendum to to the referenced report of survey:

TOTAL CARGO LOADED ON THE "MLC-331" WHICH COMPLETED ON July 1, 1986 IS AMMENDED TO READ AS FOLLOWS:

7,815.6 ST Barge = 5
6,978.2 LT
7,090.1 MT

We regret this error and apologize for the inconvenience it causes you to make adjustments in your records.

Respectfully submitted,

WALTER O. HAINES & CO.

David A. Dent

cc Ms Gay Stephenson, George Bush Co.
Mr. Herb Fear, International Terminals

PHONE 226-3747

WALTER O. HAINES & CO.

Board of Trade Bldg., Suite 333
310 S.W. 4th Avenue
Portland, Oregon 97204

WEIGHT CERTIFICATE
BASED ON DISPLACEMENT

Vessel: Barge "MLC-331"
Loaded at International Terms.

Report No. 86-381
A/C Oregon Steel Mills

		Initial: 0930 hrs June 30, 1986		Final: 1600 hrs July 1, 1986	
1.	Mean Draft Forward	2' 08.00"		12' 06.75"	
2.	Mean Draft Aft	3' 01.00"		14' 08.25"	
3.	Mean Draft Forward & Aft	2' 10.75"		13' 07.50"	
4.	Displacement per Tables	1,442.0	LT	8,490.0	LT
5.	Density Correction	0.0	LT	0.0	LT
6.	Displacement Corrected	1,442.0	LT	8,490.0	LT

A. Initial	1,442.0	LT	
B. Final	8,490.0	LT	-IRON ORE FINES-
C. Difference	7,048.0	LT	
Corrections	+ 103.2	LT	By shore scale

7. TOTAL CARGO ABOARD - 7,151.2 L/TONS
8,009.3 S/TONS
7,265.9 M/TONS

Note: Calculations in this report of survey based upon Deadweight and Displacement Scale for Barge "MLC-331" which were supplied by the barge owners.

WALTER O. HAINES & CO.

David A. Dent

CODE 503
PHONE 228-3747

WALTER O. HAINES & CO.
Marine Surveyors • Cargo Surveyors and Appraisers • Inspections

Board of Trade Bldg., Suite 555
310 S.W. 4th Avenue
Portland, Oregon 97204

WEIGHT CERTIFICATE
BASED ON DISPLACEMENT

VESSEL: Barge "MLC-331"
Loaded at International Terminals

Report No. 86-390
A/c Oregon Steel Mills

		Initial: 0700 July 11, 1986	Final: 1530 July 13, 1986
1.	Mean Draft Forward	2' 08.75"	12' 00.50"
2.	Mean Draft Aft.	2' 08.00"	15' 03.50"
3.	Mean Draft	2' 08.375"	15' 08.00"
4.	Displacement per Tables	1518.77 L/T	8483.65 L/T
5.	Density Correction	0.00 L/T	0.00 L/T
6.	Displacement Corrected	1518.77 L/T	8483.65 L/T

A.	Initial	1518.77 L/T
B.	Final	8483.65 L/T
C.	Difference	6964.88 L/T
	Corrections	179.00 L/T

7.	TOTAL CARGO ABOARD	7143.88 L/Tons
		8001.15 S/Tons Barge # 6
		7258.53 M/Tons

Note: Calculations in this report of survey based upon Deadweight and Displacement Scale for Barge "MLC-331" which were supplied by the barge owners.

WALTER O. HAINES & CO.

Peter Brauns

WALTER O. HAINES & CO.
Marine Surveyors • Cargo Surveyors and Appraisers • Inspections

Board of Trade Bldg., Suite 555
318 S.W. 6th Avenue
Portland, Oregon 97204

WEIGHT CERTIFICATE
BASED ON DISPLACEMENT

Vessel: Barge "MLC-331"
Loaded at International Terms.

Report No. 86-397
A/c Oregon Steel Mills

		Initial:0730 hrs July 24, 1986		Final:1630 hrs July 25, 1986	
1.	Mean Draft Forward	2' 05.00"		13' 04.0"	
2.	Mean Draft Aft	2' 11.00		14' 11.00"	
3.	Mean Draft Forward & Aft	2' 08.00"		14' 01.5"	
4.	Displacement per Tables	1,483.6	LT	8,778.8	LT
5.	Density Correction	0.0	LT	0.0	LT
6.	Displacement Corrected	1,483.6	LT	8,778.8	LT

A. Initial	1,483.6	LT	
B. Final	8,778.8	LT	-IRON ORE FINES-
C. Difference	7,295.2	LT	
Corrections	0.0	LT	

7. TOTAL CARGO ABOARD - 7,295.2 L/TONS
8,170.6 S/TONS
7,412.3 M/TONS

BALE # 7

Note: Calculations in this report of survey based upon Deadweight and Displacement Scale for Barge "MLC-331" which were supplied by the barge owners.

WALTER O. HAINES & CO.

David A. Dent

Mr. Peter Brauns,
Attending Surveyor

PACIFIC REGION

THE VENDOR

OREGON STEEL MILLS

Box 2760

Portland, Oregon 97208

DATE Nov. 29, 1985.

18386 M

PLEASE SHOW THIS NUMBER ON A CORRESPONDENCE, INVOICES PAC ING SLIPS AND BILLS OF LADING

SHIPPING INSTRUCTIONS

LINE NO	REC'D CORRECT	QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
1			35,000 tons (approx.) iron ore material		
2			- Material is the former Direct Reduction Division		
3			burned storage facility at Oregon Steel Mills		
4			(OSM) in Portland, OOregon.		
5			Specifications: If the material shipped averages		
6			less than 61.8 %Fe (dry basis), the price will be		
7			lowered to reflect the lower Fe content as set		
8			out under Price Adjustments below.		
9					
12			Price: $16.00 US per short ton on a dry basis		
13			delivered by barge to C.C.L's Richmond Plant.		
			Off loading at Richmond plant is at OSM's		
			expense. cont'd .../2		

C [X]
O [ ]
A [ ]

RECEIVER

ORIGINATOR

SIGNATURE

TO BE APPROVED BY

APPROVED FOR PAYMENT

SIGNATURE

CHARGE TO ACCOUNT NUMBER (S)

ACCOUNT 50-6080

COST CENTRE 101

EQUIPMENT NO.

TO BE USED FOR (IF RESALE D/S NOS.)

FED SALES TAX EXEMPT [✓] CHARGE [ ] INCLUDED

PROV SALES TAX EXEMPT [✓] NO 230475 CHARGE

LINE	QUANTITY	DATE	UNIT	LINE	QUANTITY	DATE	UNIT

CANADA CEMENT LAFARGE LT
PACIFIC REGION

AUTHORIZED SIGNATURE

PURCHASE ORDER - PART 5

PURCHASING AGENT OR BUY

TO THE VENDOR

OREGON STEEL MILLS

DATE Nov. 29, 1985 NO. 18386 E.

PLEASE SHOW THIS NUMBER ON
CORRESPONDENCE INVOICES
ING SLIPS AND BILLS OF LADING
INVOICE IN TRIPLI

LINE NO.	QUANTITY	DESCRIPTION	UNIT PRICE	AMO.
1		Price Adjustments		
2		a) Iron Content - if the average Fe content		
3		(dry basis) of the material shipped is		
4		less than 65.0% by weight (dry basis), the		
5		$16.09 US per short ton (dry basis) price		
6		will be lowered in proportion as the per-		
7		centage Fe content is to 65.0%.		
8		eg. Average Fe content is 64.0% (dry basis)		
9		Price is adjusted as follows:		
10		$\frac{64.0}{65.0} = .98$		
12		Price (dry basis) = 1609 x .98 = $15.77		
13		This price is now subject to the moisture		

adjustment as per (b).

...../3

PACIFIC BIDDER

TO THE VENDOR

OREGON STEEL MILLS

DATE Nov. 29, 1985. NO. 18386 E.

PLEASE SHOW THIS NUMBER ON CORRESPONDENCE INVOICES ING SLIPS AND BILLS OF LADING
INVOICE IN TRIPLIC

SHIPPING INSTRUCTIONS

ITEM NO.	BILL CODE	QUANTITY	DESCRIPTION	UNIT PRICE	AMOUN
1			b) Moisture: The $16.09 US per short ton (dry basis)		
2			cost will be adjusted for moisture content by		
3			reducing the weight as received (wet basis) in		
4			proportion to the moisture content of the material		
5			received (i.e. measured in the barge as it is		
6			unloaded at C.C.L.'s plant site).		
7			eg. If material received contains 13% moisture		
8			by weight, the dry basis weight will be 100% - 13%		
9			or 87% of the as received weight (wet basis). The		
10			price will be $16.09 x .87 x weight as received		
11			which is equivalent to $14.00 x weight (wet basis).		
12					
13			Analysis: Analysis of Fe content and moisture will be		

done by C.C.L. at its own expense at the time of arrival at its Richmond Plant. A sample split of each shipment will be retained for a referee sample should OSM question C.C.L.'s analysis.

...../4

PACIFIC RIM ...

TO THE VENDOR

OREGON STEEL MILLS

DATE Nov. 29, 1985. NO. 18366 H.

PLEASE SHOW THIS NUMBER ON CORRESPONDENCE INVOICES SHIPPING SLIPS AND BILLS OF LADING
INVOICE IN TRIPLI

SHIPPING INSTRUCTIONS

LINE NO.	ORDER NO.	QUANTITY	DESCRIPTION	UNIT PRICE	AMO
1			Weight Determination: The weight of material		
2			purchased will be determined in the loaded barges		
3			at Portland Oregon by a licensed marine surveyor and		
4			will constitute the basis of OSM invoices to C.C.L.		
5			If disputed, the parties will discuss and reach a		
6			mutually acceptable conclusion.		
7					
8			Payment Terms:		
9			a) Up Front Payment: C.C.L. agrees to pay $30,000 US		
10			on completion of unloading first barge.		
11			b) Deferred Payments: The balance of the first ship-		
12			ment as well as all subsequent barge shipments		
13			will be paid for by C.C.L. to OSM based on C.C.L.'s		

actual monthly usage of the iron ore material. The price of the material will be calculated upon arrival of the three barges and after adjustments for iron content and moisture.

...../5

PACIFIC METALS ...

TO THE VENDOR

OREGON STEEL MILLS

DATE Nov. 29, 1985. NO. 16386 E.

PLEASE SHOW THIS NUMBER ON CORRESPONDENCE, INVOICES, ING SLIPS AND BILLS OF LADING

INVOICE IN TRIPL

SHIPPING INSTRUCTIONS

UNIT NO.	BILL CODE	QUANTITY	DESCRIPTION	UNIT PRICE	AMO
1			Sample calculation is as follows:		
2			Total Shipment - 35,000 short tons (wet basis)		
3			- assume 13% moisture		
4			Shipment (dry basis) is 35,000 x .87 = 30,450 short ton		
5			Dry basis price - $16.09 US per short ton		
6			Iron adjustment - assume nil.		
7					
8			Total owing to OSM - 30,450 x $16.09 =	$489,940	
9			Less: up front payment =	30,000	
10			Balance owing =	$459,940	
12			Balance owing per dry ton used =	$459,940	
13				30,450	
			=	$15.10	

C.C.L. will provide OSM with actual monthly material usage reports so that OSM can invoice C.C.L. for their monthly consumption.

...../6

PLEASE SHOW THIS NUMBER ON CORRESPONDENCE INVOICES PACKING SLIPS AND BILLS OF LADING
INVOICE IN TRIPLICATE

SEE PRICE INSTRUCTIONS

UNIT OF ISSUE	QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
		c) C.C.L. anticipates but does not guarantee using		
		4,000 short tons per year of the OSM iron ore material		
		or an average of 333 tons per month.		
		Effect of Permanent Closure of Richmond Plant:		
		The parties have no expectation at this time of		
		permanent closure of the Richmond plant, but		
		recognize that use of the materials by C.C.L. in		
		making cement will stretch out over a number of		
		years. In the event that C.C.L.'s Richmond plant		

is permanently shut down before all the material has been used, C.C.L. will have no further obligation for any additional payments for the material remaining unused and title to this remaining unused material shall revert to OSM. OSM will have a reasonable time, which shall be not less than two years, to resell the material and transfer if off C.C.L.'s plant site or make other arrangements. OSM will not be required to pay to C.C.L. any rent, storage charge, insurance, or any other fees, costs, or rebates of any kind in connection with the reversion of title of the material and its presence on C.C.L's sites during the reasonable period and OSM will have the right itself or through its agents to enter C.C.L.'s property as appropriate to carry out the sales or other arrangements for the material. If title to any of the material shall revert to OSM as a result of the permanent closure of C.C.L.'s Richmond plant,

...../7

TO THE ORDER OF

OREGON STE MILLS

DATE . 29, 1985. NO. 16388 E.

PLEASE SHOW THIS NUMBER ON CORRESPONDENCE INVOICES ING SLIPS AND BILLS OF LADI

INVOICE IN TRIPL

SHIPPING INSTRUCTIONS

LINE NO	SIZE CODE	QUANTITY	DESCRIPTION	UNIT PRICE	AM
1			C.C.L. shall turn over the material in safe condition		
2			to OSM and shall be responsible for protecting the		
3			material and keeping it in a safe condition (at its		
4			own expense) during the reasonable period of sale or		
5			other disposition provided for above.		
6					
7			Transfer of Title: Title to the materials sold will		
8	-		be in OSM until the barge arrives and material is		
9	-		transferred into C.C.L.'s hopper at C.C.L.'s		
10			Richmond plant site at which time it shall shift		
11			to C.C.L. Except as provided above for material		
			for which title may have reverted to OSM, all risks		
13			of loss or damage shall be borne by the party having		
			title.		

WALTER O. HAINES & CO.
Marine Surveyors • Cargo Surveyors and Appraisers • Inspections

Board of Trade Bldg., Suite 555
310 S.W. 4th Avenue
Portland, Oregon 97204

WEIGHT CERTIFICATE
BASED ON DISPLACEMENT

Vessel "SEASPAN 251" — Report No. 85-12211
Loaded at International Terminals — A/c Oregon Steel Mills

		Initial: 1400 hrs December 3, 1985	Final: 1500 hrs December 7, 1985
1.	Mean Draft Forward	3' 03.75"	18' 07.2"
2.	Mean Draft Aft	3' 05.875"	19' 07.7"
3.	Mean Draft Forward & Aft	3' 04.8125"	19' 01.45"
4.	Midship Draft - Port	3' 03.0"	19' 03.1"
	- Stbd	3' 07.0"	19' 02.3"
	- Mean	3' 05.0"	19' 02.7"
5.	Mean of 3 & 4	3' 04.90625	19' 02.075"
6.	Mean of 4 & 5	3' 04.953125	19' 02.3875"
7.	Displacement per Tables	2,140.9 ST	14,175.2 ST

A. Initial	2,140.9 ST
B. Final	14,175.2 ST
C. Difference	12,034.3 ST
Corrections	0.0 ST

-IRON ORE CONCENTRATE-

14. TOTAL CARGO ABOARD - 12,034.3 S/TONS BARGE # 1
10,917.4 M/TONS (Factor 1.10231)
10,745.0 L/TONS (Factor 0.98421)

Note: Calculations in this report of survey based upon Deadweight Scale for barge "SEASPAN 251", supplied by Seaspan International, Ltd.

By David A. Dent
David A. Dent

WALTER O. HAINES & CO.
Marine Surveyors • Cargo Surveyors and Appraisers • Inspectors

Board of Trade Bldg., Suite 555
310 S.W. 4th Avenue
Portland, Oregon 97204

WEIGHT CERTIFICATE
BASED ON DISPLACEMENT

Vessel: Barge "MLC 340-2" Report No. 86-310
Loaded at International Terminal A/c Oregon Steel Mills

		Initial:1530 hrs March 24, 1986		Final:1400 hrs March 28, 1986	
1.	Mean Draft Forward	2' 04.5"		16' 05.75"	
2.	Mean Draft Aft	3' 06.75"		17' 01.25"	
3.	Mean Draft Forward & Aft	2' 11.625"		16' 09.5"	
4.	Displacement per Tables	1,950.0	LT	12,270.0	LT
5.	Density Correction	- 47.6	LT	- 299.3	LT
6.	Displacement Corrected	1,902.4	LT	11,970.7	LT

A.	Initial	1,902.4	LT
B.	Final	11,970.7	LT
C.	Difference	10,068.3	LT
	Corrections	0.0	LT

-IRON ORE CONCENTRATE-

14. TOTAL CARGO ABOARD - 10,068.3 L/TONS
11,276.5 S/TONS
10,229.9 M/TONS (Factor .98421 LT)

Note: Calculations in this report of survey based upon Displacement Lines of Curve supplied by carrier.

WALTER O. HAINES & CO.

David A. Dent

WALTER O. HAINES & CO.
Marine Surveyors • Cargo Surveyors and Appraisers • Inspections
226-3747
Board of Trade Bldg Suite 311
310 SW 4th Avenue
Portland, Oregon 97204

WEIGHT CERTIFICATE
BASED ON DISPLACEMENT

Vessel: Barge "MLC-340-2"
Loaded at International Terms.

Report No. 86-356
A/c Oregon Steel Mills

		Initial:0730 hrs June 1, 1986		Final:2330 hrs June 2, 1986	
1.	Mean Draft Forward	2' 07.00"		11' 03.00"	
2.	Mean Draft Aft	3' 02.00"		12' 08.00"	
3.	Mean Draft Forward & Aft	2' 10.50"		11' 11.50"	
4.	Displacement per Tables	1,970.0	LT	8,470.0	LT
5.	Density Correction	- 48.0	LT	-206.6	LT
6.	Displacement Corrected	1,922.0	LT	8,263.4	LT

A. Initial	1,922.0	LT
B. Final	8,263.4	LT
C. Difference	6,341.4	LT
Corrections	0.0	ST

-IRON ORE FINES-

7. TOTAL CARGO ABOARD -

6,341.4 L/TONS
6,443.1 M/TONS (Factor .98421)
7,102.3 S/TONS (Factor 1.10231)

Note: Calculations in this report of survey based upon [illegible] and Deadweight Scale for Barge "MLC-340-2" supplied by the [illegible] owners.

WALTER O. HAINES & CO.

David A. Dent

WALTER O. HAINES & CO.

Marine Surveyors • Cargo Surveyors and Appraisers • Inspections

Board of Trade Bldg. Suite 355
310 S.W. 4th Avenue
Portland, Oregon 97204

WEIGHT CERTIFICATE
BASED ON DISPLACEMENT

Vessel: Barge "MLC-230"
Loaded at International Terms.

Report No. 86-368
A/c Oregon Steel Mills

		Initial:0730 hrs June 18, 1986		Final:1545 hrs June 18, 1986	
1.	Mean Draft Forward	2' 03.00"		7' 11.50"	
2.	Mean Draft Aft	2' 03.50"		9' 02.00"	
3.	Mean Draft Forward & Aft	2' 03.25"		8' 06.75"	
4.	Displacement per Tables	795.0	ST	3,170.0	ST
5.	Density Correction	- 19.4	ST	- 77.3	ST
6.	Displacement Corrected	775.6	ST	3,092.7	ST

A. Initial	775.6	ST	
B. Final	3,092.7	ST	-IRON ORE FINES-
C. Difference	2,317.1	ST	
Corrections	0.0	ST	

7. TOTAL CARGO ABOARD - 2,317.1 S/TONS
2,102.0 M/TONS (Factor 1.10231)
2,068.8 L/TONS (Factor .98421)

Note: Calculations in this report of survey based upon Curves of form and Deadweight Scale for Barge "MLC-230" which were supplied by Nikum & Spaulding Associates, Inc., Naval Architects.

WALTER O. HAINES & CO.

David A. Dent

Mr. John Graff
Attending Surveyor

OREGON STEEL MILLS

P.O. Box 2760
Portland, Oregon 97208
Phone (503) 286-9651

August 28, 1986

Ms. Janet A. Gillaspie
Regional Manager
Northwest Region
Department of Environmental Quality
P. O. Box 1760
Portland, Or 97204

Dear Janet:

We have decided to continue our original plans and remove all of the material in the DRD Ore Storage Facility from our property for recycling. In our last meeting you asked Tom McCue and myself how we were going to "close" the DRD Ore Storage Facility. In reviewing the regulations, we do not feel that any "closure" is required. Attached is a letter from Marvin Durning, our attorney, substantiating this.

Our plans are that after all the material is removed from this facility, we will provide you with the appropriate documentation showing that all the material has been transferred off site for recycling (Regulation 261.2 (f)).Once we do this, we have met all the obligations of the regulations and we will push in the sides and add additional fill as needed to bring the property to level again.

Hopefully, all the material will be gone sometime in 1986, and this long, troublesome project will be completed.

If you have any comments or questions on the above, please contact me directly.

Yours Respectfully,

Richard C Bird

Richard C. Bird
Manager, Process Engineering

RCB/rs
Enclosure
cc: Jan Whitworth, Manager, Hazardous Waste Section
M. Durning
B. Ferris
T. McCue

OREGON STEEL MILLS

P.O. Box 2760
Portland, Oregon 97208
Phone (503) 286-9651

Marvin D. [illegible]
a copy to EPA. We were
going to have meeting
with Marvin & EPA but
we could not get to
Seattle since Seattle
was fogged in. Marvin
had meeting without us.
(Tom McCue & [illegible]) [illegible]

October 13, 1986

Mr. Chuck Rice
RCRA Compliance and Permits Branch
U.S. Environmental Protection Agency
1200 Sixth Avenue
Seattle, WA 98101

RE: <u>EPA v. Gilmore Steel Corporation</u>
RCRA Docket No. X84-03-27-3008
Consent Agreement and Final Order

Dear Mr. Rice:

In his letter of September 29, 1986 on our behalf, Mr. Durning explained briefly our request to terminate monitoring pursuant to the Consent Order entered into on February 8, 1985, which will expire by its own terms on February 8, 1987. This is to provide you further information prior to our meeting on Thursday, October 16, 1986 at 2:00 p.m. in your office.

You will recall that after the signing of the Consent Order it was determined that the iron oxide material in our DRD ore storage facility was not a RCRA hazardous waste because it fell within the exemption for recyclable materials used as an ingredient to repoduce a product, and not reclaimed. This exempt status has been maintained at all times by sale and shipment of the material offsite for use in making ferric cement and by a variance granted by Oregon DEQ extending time for the shipments. We met the terms of the variance and transferred more than 75% of the material offsite for recycling before July 1, 1986, the deadline within the variance.

Indeed, we have now taken all of the material (except about two cubic yards which are wet but will be removed if required) out of the ore storage facility and all but about 2,000 tons has already been shipped offsite for recycling while the small remainder is at railhead on our site and is being shipped out at the rate of two railcars per week to a U.S. cement manufacturer for use in making ferric cement.

The eighth barge of iron ore has just been shipped to Canada Cement LaFarge LTD for use as an ingredient in the manufacture of cement. Over the past 11 months, we have shipped approximately 85,835 tons of iron ore (including moisture) out of the ore storage facility to Canada and we are happy to report that this last barge essentially emptied the iron ore storage facility.

DEQ inspected the facility on Thursday, November 9, 1986. We are awaiting word from DEQ.

In our Partial Consent Agreement and Final Order dated February 8, 1985, we were to sample and analyze the ground water out of the following wells: GS-1, GS-3, GS-8, GS-9, GS-10. To date GS-1 and GS-9 have been sampled and analyzed five consecutive quarters. GS-3 has been sampled six consecutive quarters. GS-8 and GS-10 have both been sampled for four consecutive quarters. Finally, all wells in the ground water monitoring system were sampled and analyzed for constituents in 265.92 (b) - 1, 2 and 3 in May 1986, and reported in July 1986.

All these samples analyzed have shown the ground water to contain no lead chromium or cadmium at a confidence level of 99 percent or better. No other contaminants have been detected that are significantly different from background.

Now that the ore storage facility is empty, rain water will fill up the area and could become a safety problem. Also, construction work on this property will be much more difficult and expensive if we wait until the heavy rains come and fill this facility. Secondly, for over three years the property has been in limbo and we have not been able to do anything with it. This is a prime piece of property on the river which Oregon Steel Mills would like to begin using again.

Under paragraph 2F of the Partial Consent Agreement and Final Order, "the terms of the Order may be modified by written mutual agreement of the parties." Therefore, we respectfully request that further sampling and analysis be waived in order that we may properly close the wells, push in the dikes, fill and level the property, and then begin using it again. Discontinuance of monitoring is necessary because filling the ore storage facility would eliminate elevation point GS-7 and wells GS-8, 9 and 10.

We look forward to meeting with you on October 16, 1986.

Very truly yours,

Richard C Bird

Richard Bird
Manager, Process Engineering

cc: Barbara Leither, Esq., EPA
Janet Gillaspie, DEQ
Marvin B. Durning
Leonard Hollenbeck
Tom McCue

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 SIXTH AVENUE
SEATTLE, WASHINGTON 98101

October 22, 1986

REPLY TO ATTN OF M/S 613

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Marvin B. Durning, Attorney
1411 Fourth Avenue Bldg., Suite 920
Seattle, Washington 98101-2212

Re: EPA v. Gilmore Steel Corporation
RCRA Docket X84-03-27-3008

Dear Mr. Durning:

This letter is in response to your letter of September 29, 1986, and Oregon Steel Mills letter of October 13, 1986, to Mr. Charles Rice of the Environmental Protection Agency, regarding Oregon Steel Mill's activities at the DRD ore storage/disposal unit at its Portland, Oregon facility.

It is our understanding that no hazardous waste remains in the referenced unit, and that this will be verified by Oregon Steel Mills within ten (10) days of the receipt of this letter. It is also our understanding that the results of the October 1986 ground water sampling at the facility will be submitted to EPA with all due speed.

Because the unit is now covered by the recycling regulations, EPA does not object to terminating the above-referenced consent agreement. This statement should satisfy the requirements of Section IV.F. of the Consent Agreement and Order, and relieve Oregon Steel Mills of any further responsibilities under the Order. In addition, EPA does not object to the construction activities described in the recent letters to EPA.

As we stated to you on October 16, 1986, EPA reserves any rights it may have to require additional monitoring or testing or other investigatory work, pursuant to Section 3013 of RCRA or other statutes, at any time in the future. EPA will continue to evaluate ground water data from the site.

If I can be of further help or you have questions or comments on this matter, please contact me at (206) 442-1191.

Technical questions should be directed to Stephanie Mead, EPA RCRA compliance officer.

Sincerely,

D. Henry Elsen
Assistant Regional Counsel

cc: Janet Gillespie, DEQ
Brett McKnight, DEQ
Oregon Steel Mills, Inc.

OREGON STEEL MILLS

PO Box 2760
Portland, Oregon 97208
Phone (503) 286-9651

October 23, 1986

Mr. Chuck Rice
RCRA Compliance and Permits Branch
U.S. Environmental Protection Agency
1200 Sixth Avenue
Seattle, WA 98101

RE: EPA v. Gilmore Steel Corporation
RCRA Docket No. X84-03-27-3008
Consent Agreement and Final Order

Dear Mr. Rice:

This is to advise you that we have removed the last few cubic yards of iron ore from the Ore Storage Facility and placed it with the small amount of material at the rail head which is being shipped to a cement manufacturer for recycling into cement.

Therefore the Ore Storage Facility is now completely empty. We again request your prompt approval to push in the dykes, etc. as per our letter of October 13, 1986.

We look forward to hearing from you soon.

Respectfully yours,

Richard C Bird

Richard C. Bird, P.E.
Manager, Environmental & Energy

cc: Janet Gillaspie
Marvin Durning
Leonard Hollenbeck

VICTOR ATIYEH
Governor

Department of Environmental Quality

522 S.W. FIFTH AVENUE, BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

October 29, 1986

Richard C. Bird
Oregon Steel Mills
14400 N. Rivergate Blvd.
Portland, OR 97203

Re: Oregon Steel Mills
DRD Ore Storage Facility
EW-Multnomah Co.

Dear Mr. Bird:

On October 27, 1986 I inspected the DRD Ore Storage Facility at the Oregon Steel Mills plant in North Portland. In accordance with your plan to recycle the iron oxide and baghouse dust in this facility, all material has been removed from the plant site.

EP toxicity tests on the last of the material removed from the facility indicate that the material is not hazardous. You may proceed with your plans to level the storage facility and to discontinue your groundwater monitoring program.

When the last of the material has been recycled, please provide documentation on the recycling of all the material. If you have any questions, please contact me at 229-5296.

Sincerely,

Edward Woods

Edward Woods
Senior Environmental Analyst
Northwest Region

ED:y
RY3561
cc: Hazardous and Solid Waste Division, DEQ

OREGON STEEL MILLS

P.O. Box 2760
Portland, Oregon 97208
Phone (503) 286-9651

December 18, 1987

Janet A. Gillaspie
Manager, Northwest Region
Department of Environmental Quality
P.O. Box 1760
Portland, OR 97207

SUBJ: **Documentation of Iron Ore Removal for Recycling or Reuse**

Dear Ms. Gillaspie:

This letter is to inform you that all the iron ore has been shipped to either Canada Cement LaFarge, LTD, or to Ash Grove Cement West, Inc. for use as an ingredient in the manufacture of cement. The total amount of iron ore shipped is 68,963.8 short tons and is shown in the breakdown below:

	Location Shipped	Loading Completed	Amount Short Tons Shipped
Barge 1	LaFarge	12-7-85	12,034.3
2	LaFarge	3-28-86	11,276.5
3	LaFarge	6-2-86	7,102.3
4	LaFarge	6-18-86	2,317.1
5	LaFarge	7-1-86	7,815.6
6	LaFarge	7-13-86	8,001.2
7	LaFarge	7-25-86	8,170.6
8	LaFarge	9-24-86	9,116.8
RR UP18034	Ash Grove	6-26-86	79.0
UP40631	Ash Grove	7-9-86	81.3
UP18415	Ash Grove	7-11-86	74.4
UP40772	Ash Grove	7-18-86	84.9
UP40631	Ash Grove	7-23-86	85.1
UP18504	Ash Grove	7-31-86	84.4
UP18907	Ash Grove	8-7-86	89.2
UP18601	Ash Grove	8-13-86	87.5
UP18415	Ash Grove	8-20-86	93.7
UP40772	Ash Grove	8-29-86	86.0
UP40631	Ash Grove	9-5-86	98.0
UP18504	Ash Grove	9-15-86	95.7
UP18415	Ash Grove	9-17-86	85.1
UP40772	Ash Grove	9-19-86	98.3
UP18034	Ash Grove	9-24-86	95.3

	Location Shipped	Loading Completed	Amount Short Tons Shipped
RR UP18728	Ash Grove	9-29-86	95.2
UP18415	Ash Grove	10-1-86	100.1
UP40631	Ash Grove	10-7-86	99.1
UP40772	Ash Grove	10-14-86	82.1
UP18601	Ash Grove	10-20-86	69.1
MP582187	Ash Grove	10-29-86	90.1
UP40602	Ash Grove	10-29-86	94.2
UP37416	Ash Grove	10-29-86	92.4
UP39526	Ash Grove	10-29-86	96.2
TRUCK 35	Ash Grove	6-24-87	30.0
35	Ash Grove	6-25-87	30.6
35	Ash Grove	6-26-87	31.5
35	Ash Grove	6-30-87	31.0
35	Ash Grove	7-1-87	32.0
35	Ash Grove	7-7-87	30.5
35	Ash Grove	7-8-87	31.6
35	Ash Grove	7-14-87	30.3
35	Ash Grove	7-15-87	30.4
35	Ash Grove	7-22-87	30.8
33 & 28	Ash Grove	8-11-87	31.5
32 & 28	Ash Grove	8-12-87	31.8
35	Ash Grove	8-24-87	30.3
RR UP40598	Ash Grove	10-30-87	63.2
UP37286	Ash Grove	10-30-87	60.8
UP38475	Ash Grove	10-30-87	65.6
UP39172	Ash Grove	11-6-87	68.3
UP37783	Ash Grove	11-6-87	58.6
UP40342	Ash Grove	11-6-87	48.5
UP40553	Ash Grove	11-6-87	53.1
UP40264	Ash Grove	11-6-87	54.5
MP582980	Ash Grove	11-6-87	47.0
UP40533	Ash Grove	11-6-87	71.1
		Total	68,963.8

I have included documentation for all shipments above. This closes for good the iron ore storage facility at our plant. If you have any questions, please contact me at 286-9651, extension 319.

I hope that you and all the staff at DEQ have a Merry Christmas and a Happy New Year!

Respectfully yours,

Richard C Bird

Richard C. Bird

cc: Marvin Durning
Kenneth Feigner, EPA, Region 10

Science Applications International Corporation
An Employee-Owned Company
Technology Services Company

September 30, 1992 DCN: TZ4-C10021-RN-11846

Ms. Deborah Robinson
U.S. Environmental Protection Agency
Hazardous Waste Division (HW-112)
1200 Sixth Avenue
Seattle, Washington 98101

Re: EPA Contract No. 68-W9-0008
Work Assignment No. C10021, Gilmore Steel Mills RPA
SAIC/TSC Project No. 6-788-03-1400-520

Dear Ms. Robinson:

Please find enclosed the final RCRA Preliminary Assessment (RPA) report for the Gilmore Steel Mills facility located in Portland, Oregon. Because the facility submitted their responses to the VSI Needs letter as RCRA Confidential Business Information (CBI); portions of the final report that were prepared referencing this information have been designated as CBI. These sections of the report appear as bold type in the text of the document.

Please feel free to contact Kathryn Gladden at 206/485-2818 if you have any questions or comments regarding this report.

Sincerely,

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION
Technology Services Company

Kathryn Gladden
Work Assignment Manager

Enclosure
cc: M. Bailey, EPA RCRA Site Manager
M. Slater, EPA Region 10 RCRA EPI Coordinator (cover letter only)
T. Tobin, SAIC/TSC RPM (cover letter only)
K. Gladden, SAIC/TSC WAM (cover letter only)

4.7 SWMU 7 - FORMER DRD STORAGE/SLURRY POND (Photo No. 6)

4.7.1 Information Summary

Unit Description: The former Direct Reduction Department (DRD) Storage/Slurry Pond was an asphalt-lined, bermed pond used for storage of metal oxides (product) prior to reduction to be used as a part of the steel manufacturing process. The pond occupied approximately five to seven acres (Photo No. 6).(2,8,18) Iron ore fines were brought in by ship, mixed with river water while still on board, and conveyed to the pond. (Water was used to make it easier to move the ore fines.) The pond was equipped with slurry screen (toothed scraper) that was dragged through the ore to remove any large debris. There were no release pipes or overspill valves associated with this pond. After negotiation between Gilmore, ODEQ, and EPA, this pond was determined not to be a RCRA regulated unit.(10,23) Figures 2 and 5 show the location of the DRD Storage Pond onsite.

Dates of Operation: The pond was constructed during plant construction in 1969, and became inactive in 1980. Between 1984 and 1986, the remaining contents of the pond were shipped offsite for recycling. In 1986, ODEQ and EPA approved the back filling of the empty pond with soil from the berms, and other soils from onsite.(21,23)

Wastes Managed: ICA baghouse dust (K061), a listed hazardous waste, was also occasionally placed into the pond for reuse in the DRD process. Gilmore petitioned ODEQ and EPA to reclassify the dust as a recyclable material.(2,23,30,46)

Release Controls: The asphalt linings and berms acted to control spillage. Sampling results indicate that non-hazardous salts were migrating from the pond area (Section 3.6).

History of Releases: A network of monitoring wells was installed surrounding this unit. Ground water samples were collected from the monitoring wells between 1984 and October 1986. Analysis of ground water samples indicated that releases of lead and cadmium associated with K061 dust did not occur. Arsenic concentrations exceeded primary drinking water standards in several of the samples from monitoring well GS-8. Analytical data for these monitoring wells is presented in Appendix D with a discussion in section 3.6.(20,24)

4.7.2 Conclusions

The contents were reclassified and were not considered waste after 1985. Since that time, contents were removed from the pond making the potential for ongoing releases to the environment low.

APPENDIX D

1985 PCB SPILL
SOIL CHARACTERIZATION ANALYTICAL DATA

COFFEY LABORATORIES, INC.
4914 N.E. 122nd Ave.
Portland, OR 97230
Phone: (503) 254-1794

October 30, 1985
Log #A851038-A
PO#: 40300

Oregon Steel Mills
P.O. Box 2760
Portland, Oregon 97208

Attention: Tom McCue

Analysis Requested: Polychlorinated Biphenyls (PCB)

Sample Description: Soil

SAMPLE ID	mg/Kg PCB	MAIN ARCHLOR
Sample #1	1.1	1242
Sample #2	0.8	1242
Sample #2 (Duplicate)	0.8	1242
Sample #3	2.4	1242
Sample #4	1.8	1242
Sample #5	1.6	1242
Sample #6	1.9	1242
Sample #7	2.5	1242
Sample #7 (Duplicate)	2.6	1242
Sample #8	3.3	1242
Sample #9	7.9	1242
Sample #10	5.9	1242
Sample #11	1.7	1242
Sample #12	4.6	1242

Sincerely,
Susan M. Coffey
Susan M. Coffey,
President

SMC/gs

This report is for the sole and exclusive use of the above client. Samples are retained a maximum of 15 days from the date of this letter.

COFFEY LABORATORIES, INC.
6914 N.E. 122nd Ave.
Portland, OR 97230
Phone: (503) 254-1794

November 22, 1985
Log #H851120-C

Oregon Steel Mills
P.O. Box 2760
Portland, Oregon 97208

Attention: Tom McCue

Analysis Requested: Polychlorinated Biphenyls

SAMPLE ID	mg/kg PCB	MAIN AROCHLOR
Sample #13	4.1	1242
Sample #14	4.9	1242
Sample #15	2.6	1242
Sample #16	6.6	1242
Sample #16 Duplicate	6.3	1242

Sincerely,
Susan M. Coffey
Susan M. Coffey,
President

SMC/gs

This report is for the sole and exclusive use of the above client. Samples are retained a maximum of 15 days from the date of this letter.

Oregon
John A. Kitzhaber, M.D., Governor

Department of Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696
TTY (503) 229-6993

August 23, 2001

Krista I. Born
Stoel Rives LLP
Standard Insurance Center
900 SW Fifth Avenue, Suite 2600
Portland, Oregon 97204-1268

Dear Ms. Born:

We have received your letter dated August 6, 2001 requesting a 45-day extension of the comment period regarding the listing of the Oregon Steel Mills-Rivergate on the Confirmed Release List and Inventory. Your request has been granted. You now have until October 1, 2001 to submit any information you believe to be relevant.

Please submit comments to me at the address shown on the letterhead. If you have any further questions, please feel free to call me at (503) 229-5256.

Sincerely,

Kimberlee Van Patten
Listing Coordinator
Site Assessment Program
Environmental Cleanup Division

cc: Thomas Gainer; NWR, DEQ
ECSI File 141

Oregon
John A. Kitzhaber, M.D., Governor

Department of Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696
TTY (503) 229-6993

June 18, 2001

Drew Gilpin
Oregon Steel Mills Inc.
PO Box 2760
Portland, Oregon 97208

CERTIFIED MAIL NO. 7000 0520 0023 2625 8835
RETURN RECEIPT REQUESTED

RE: **SECOND NOTICE TO CURRENT AND/OR PAST OWNERS AND OPERATORS OF PROPOSAL TO ADD CONTAMINATED PROPERTY TO DEQ'S CONFIRMED RELEASE LIST AND INVENTORY**
Oregon Steel Mills-Rivergate
14400 N. Rivergate Blvd., Portland
ECSI ID #141
Basic Preliminary Assessment 28-FEB-90

Dear Mr. Gilpin:

By letter dated November 12, 1999 the Department of Environmental Quality (Department) Site Assessment Program notified you, as an owner or operator of the Oregon Steel Mills-Rivergate site, of the Department's proposal to add this facility to the Confirmed Release List (CRL). The notice invited comments to the proposed listings.

DEQ received comments from Hart Crowser (letter dated February 17, 2000), submitted on behalf of OSM regarding the proposed listing. Based on DEQ's review of these comments and OSM's intent to perform a pre-remedial investigation, DEQ placed the proposed listing on hold. DEQ reevaluated the need for listing following a review of the Pre-Remedial Investigation Assessment being conducted under the Voluntary Agreement for a Remedial Investigation and Source Control Measures between OSM and DEQ. The results of the Pre-RI documented the presence of petroleum hydrocarbons, polycyclic aromatic hydrocarbons (PAHs), and metals in on-site soils and Willamette River sediments adjacent to the facility. Polychlorinated biphenyls (PCBs) were detected in selected sediment samples.

This letter is notification that we are moving forward with the listing process. Because we are aware that circumstances regarding this site may have changed since the Oregon Steel Mills-Rivergate site was originally proposed, you have an opportunity to provide any comments you believe will correct or supplement this listing information. All comments must be received by the Department within sixty (60) days from your receipt of this notice. If you are unable to respond within the initial 60-day comment period, you may request an extension of forty-five (45) days.

Listing this property does not necessarily mean that you are responsible for the contamination, investigation or cleanup. Various provisions in state and federal laws prescribe responsibility for these activities. The site can be removed from either the CRL or Inventory after all necessary actions are taken to ensure protection of human health and the environment. We appreciate the work you have done to clean up or investigate this site and hope we can continue to work together to eliminate threats to Oregon from hazardous materials.

Comments and requests for extensions should be sent to:

Oregon Department of Environmental Quality
Site Assessment Program
Environmental Cleanup Division
811 SW 6th Avenue, 8th Floor
Portland, OR 97204

Enclosed, please find several supporting documents that outline current site conditions, explain the listing process, and document how the site meets the listing criteria described in state laws and administrative rules. If you have specific questions about the CRL, Inventory, or site activities, or want copies of the Oregon Environmental Cleanup Law, please contact the Department's listing coordinator Kimberlee Van Patten at (503) 229-5256 or at the address shown above.

Sincerely,

Charles W. Donaldson
Manager
Spills and Site Assessment

Enclosures: 1) Site Summary Report; 2) Fact Sheet; 3) Site-Specific Data Sheet; 4) Oregon Statutes & Rules
cc: Rod Struck; NWR, DEQ
ECSI File # 141

Site-Specific Data Supporting a CRL and Inventory Listing Proposal by the Oregon Department of Environmental Quality

This document references the facts and judgments that DEQ has relied upon to propose the site shown below for the Confirmed Release List (CRL) and Inventory . This document, with the attached summary of listing statutes/rules and the ECSI site summary report, also shows how the listing proposal satisfies applicable Oregon law and administrative rules. (This document presents only the minimum documentation requirements for CRL and Inventory listing; more detailed information about the site can be found in the ECSI files in DEQ's regional offices.)

A. Site name and ECSI #: **Oregon Steel Mills-Rivergate ECSI #141**

B. Site address: **14400 N. Rivergate Blvd., Portland**

C. DEQ is proposing this site for the: **CRL & Inventory**

D. Date of original listing proposal: **November 12, 1999**

E. DEQ has documented a confirmed release at the site based on:

1. Written admission of a release.
   Nature and date of documentation: **Pre-Remedial Investigation Field Activities report submitted to DEQ February 2, 2001.**
   Party submitting to DEQ: **Exponent, on behalf of Oregon Steel Mills.**
2. Laboratory data from on-site sampling, contained in the site file.
   Date of on-site sampling or laboratory data report: **Laboratory data from October 2000, contained in Pre-Remedial Investigation Field Activities report submitted to DEQ February 2, 2001.**
   On-site media with documented contamination: **Soil and groundwater.**
   Type(s) of contamination documented at the site: **Petroleum hydrocarbons, polynuclear aromatic hydrocarbons, metals.**
   Is this contamination present above background levels: **Y**

F. DEQ has determined that CRL listing exclusion criteria do not apply to this site because:

1. The release is not of *de minimis* (insignificant) proportions; and
2. The release is not known to have dissipated; and
3. Neither DEQ nor EPA has authorized the release by permit (or the release was permitted, but has accumulated or migrated); and
4. The released substance is not a registered pesticide product applied appropriately (or it is such a product that has accumulated or migrated); and
5. DEQ is not aware of any remedial action that has eliminated all risks the release may have posed to human health or the environment; and
6. DEQ is unable to conclude that the release requires no further investigation, cleanup, or long-term controls to protect human health or the environment.

G. DEQ has completed the required documentation for CRL listing, as follows.

1. Facility address, location, and description: refer to items A and B above for site address and location, and the ECSI site summary report for known information about the facility.
2. How and when the release occurred (if known): refer to the "Contamination Information" or "Manner and Time of Release" narratives in the ECSI site summary report.

3. Types and quantities of hazardous substances involved: refer to the ECSI site summary report, specifically the "Hazardous Substance/Waste Types" or "Contamination Information" narratives, or the "Substance Contamination" section.
4. The nature of facility contamination and status of remedial action (if known): refer to the "Contamination Information," "Media Contamination Comments," "Pathways," or "Status of Investigative or Remedial Action" narratives in the ECSI site summary report.
5. Persons who may have owned/operated the facility when the release occurred: Based on information in its files, DEQ has entered this information into the "Parties" section of the ECSI site summary report.

H. For Inventory proposals, DEQ has documentation of an on-site confirmed release and has used a site-specific preliminary assessment (PA) or equivalent to determine that either: 1) further action is needed at the site to protect human health or the environment; or 2) long-term controls are needed at the site to ensure ongoing protection of human health and the environment.

Title(s) and date(s) of site-specific PA or equivalent document(s):

"Pre-Remedial Investigation Summary of Findings from Historical Investigation," 11/3/00.
"Pre-Remedial Investigation Field Activities Data Report," 2/2/01.

Date that DEQ sent PA or equivalent documents to owner/operator (if applicable): NA – documents submitted by owner to DEQ.

I. DEQ has completed the required documentation for Inventory listing, as follows.

1. Description of additional investigation, remedial action, or long-term controls DEQ believes is needed at the site: refer to the conclusions or recommendations section of the PA or equivalent cited in item H. above, or to the "Status of Investigative or Remedial Action" narrative in the ECSI site summary report.
2. Description of threats the facility may pose to humans or the environment: refer to the conclusions or recommendations section of the PA or equivalent cited in item H. above, or to the "Environmental/Health Threats" narrative in the ECSI site summary report.
3. Ranking of site threats: DEQ has ranked this site as a low, medium, or high priority for further action, as shown in the "Status of Investigative or Remedial Action" narrative or the "Investigative, Remedial, and Administrative Actions" section of the ECSI site summary report. DEQ's ranking is based on a completed Site Assessment Prioritization System (SAPS) scoresheet.
4. The source of funding for remedial action: If known, this information is shown at the end of the site summary report.

WISTAR Gil

From: STRUCK Rodney
Sent: Thursday, June 07, 2001 2:46 PM
To: WISTAR Gil
Subject: RE: OR Steel Mills

I spoke with Drew this afternoon and let him know we were moving forward with the Listing for both the CRL and the Inventory. I told him they would have 60 days to comment on the proposed listing and if needed and requested a 45-day extension could be granted. I also told him the proposed listing is based on the results from the recent pre-RI investigation and not on the same basis the original proposed listing.

Rod Struck

Oregon Department of Environmental Quality
Northwest Region
Voluntary Cleanup and Portland Harbor Section
2020 SW Fourth Avenue, Suite 400
Portland, Oregon 97201

Phone: (503)229-5562
FAX: (503)229-6899

Visit DEQ's web page at: www.deq.state.or.us

-----Original Message-----
From: WISTAR Gil
Sent: Thursday, June 07, 2001 2:43 PM
To: STRUCK Rodney
Subject: OR Steel Mills

Rod,

As a follow-up to our recent conversation, could you please let me know after you've spoken with Drew Gilpin that he's aware the re-proposal letter is coming and that OSM will have only until July 20 to comment?

Thanks!

--Gil

Oregon
John A. Kitzhaber, M.D., Governor

Department of Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696
TDD (503) 229-6993

October 13, 2000

CERTIFIED MAIL NO. 7000 0520 0012 1886 2518
RETURN RECEIPT REQUESTED

Drew Gilpin
Oregon Steel Mills Inc.
PO Box 2760
Portland, Oregon 97208

RE: NOTICE TO CURRENT AND/OR PAST OWNERS AND OPERATORS OF DECISION TO DEFER CONFIRMED RELEASE LIST AND INVENTORY LISTING DECISION PENDING OUTCOME OF PRE-REMEDIAL INVESTIGATION ASSESSMENT
Oregon Steel Mills-Rivergate
14400 N. Rivergate Blvd., Portland
ECSI ID NO. # 141

Dear Mr. Gilpin:

By letter dated November 12, 1999 the Department of Environmental Quality (Department) Site Assessment Program notified you as an owner or operator of the Oregon Steel Mills-Rivergate (OSM) site of the Department's proposal to add this facility to the Confirmed Release List (CRL) and Inventory. The notice invited comments on the proposed listing.

On February 10, 2000 Pacific Power & Light representative John Aniello notified the Department that Pacific Power & Light Co. (PP&L) is not the current owner of the property and to his knowledge, had not historically owned the property. The Department reviewed its files and available property records and found no record indicating PP&L owned the subject property. Therefore, PP&L has been removed as a site owner from the Department's Environmental Cleanup Site Information (ECSI) database.

Additionally, the Department received comments from Hart Crowser dated February 17, 2000, submitted on behalf of OSM regarding the proposed listing. Based on the Department's review of these comments and pending the results of an upcoming investigation, the Department is placing the proposed listing on hold. The Department will reevaluate the need for listing following review of the Pre-Remedial Investigation Assessment being conducted under the Voluntary Agreement for a Remedial Investigation and Source Control Measures between OSM and the Department.

If you have specific questions about the CRL or Inventory, or want copies of the statute or regulations governing the Department's site assessment, listing, or cleanup processes, please contact Listing Coordinator Kimberlee Van Patten at (503) 229-5256 or project manager Rod Struck at (503) 229-5562.

Sincerely,

Michael J Zolitsch for

Charles W. Donaldson
Manager
Spills and Site Assessment Section

Enclosures: Site Summary Report
cc: Rod Struck; SRS, DEQ
ECSI File # 141

Oregon
John A. Kitzhaber, M.D., Governor

Department of Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696
TDD (503) 229-6993

October 13, 2000

CERTIFIED MAIL NO. 7000 0520 0012 1886 2525
RETURN RECEIPT REQUESTED

John Aniello
Pacific Power & Light Co.
825 NE Multnomah Ste 2013LCM
Portland, Oregon 97232

RE: **NOTICE TO CURRENT AND/OR PAST OWNERS AND OPERATORS OF DECISION TO DEFER CONFIRMED RELEASE LIST AND INVENTORY LISTING DECISION PENDING OUTCOME OF PRE-REMEDIAL INVESTIGATION ASSESSMENT**
Oregon Steel Mills-Rivergate
14400 N. Rivergate Blvd., Portland
ECSI ID NO. # 141

Dear Mr. Aniello:

By letter dated November 12, 2000 the Department of Environmental Quality (Department) Site Assessment Program notified you as an owner or operator of the Oregon Steel Mills-Rivergate site of the Department's proposal to add this facility to the Confirmed Release List (CRL) and Inventory. The notice invited comments on the proposed listing.

On February 10, 2000 you notified the Department that Pacific Power & Light Co. (PP&L) is not the current owner of the property and to your knowledge had not historically owned the property. The Department has reviewed its files and available property records and found no record indicating PP&L owned the subject property. PP&L has been removed as a site owner from the Department's Environmental Cleanup Site Information (ECSI) database. A copy of the updated Site Summary Report is attached for your files.

If you have specific questions about the ECSI database or the Oregon Steel Mills – Rivergate site, please contact Rod Struck at (503) 229-5562.

Sincerely,

Michael J. Zollitsch for

Charles W. Donaldson,
Manager
Spills and Site Assessment Section

Enclosures: Site Summary Report
cc: Rod Struck; SRS, DEQ
ECSI File # 141

OSM 141
COM

HARTCROWSER
Delivering smarter solutions

www.hartcrowser.com

Letter of Transmittal

To:	Oregon Department of Environmental Quality	*Date:*	February 17, 2000
	811 SW Sixth Ave.		
	Portland, OR 97204-1390	*Job No:*	J-5940
Attn:	Mr. Paul Slyman, Manager , Cleanup Policy and Program Development		
Re:	Oregon Steel Mills		

We are sending the following items:

Date	Copies	Description
2/17/00	1	Letter for Confirmed Release List and Inventory Listing
		Oregon Steel Mills, ESCI #141

These are transmitted:

☐ *For your information* ☐ *For action specified below* ☐ *For review and comment* ☑ *For your use* ☐ *As requested*

Remarks

Copies to: Drew Gilpin, Oregon Steel Mills
Mr. Louis Ferreira, Stoel Rives

By: Randi
Randi Wexler
Title: Senior Associate, Regulatory Specialist

RECEIVED
FEB 17 2000

Anchorage
Boston
Chicago
Denver
Fairbanks
Jersey City
Juneau
Long Beach
Portland
Seattle

Five Centerpointe Drive, Suite 240
Lake Oswego, Oregon 97035-8652
Fax 503.620.6918
Tel 503.620.7284

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Seattle

February 17, 2000

Mr. Paul Slyman
Oregon Department of Environmental Quality
Manager, Cleanup Policy and Program Development
811 SW Sixth Avenue
Portland, Oregon 97204-1390

Re: Confirmed Release List and Inventory Listing
Oregon Steel Mills
ESCI #141
J-5940

Dear Mr. Slyman:

On behalf of Oregon Steel Mills (OSM), Hart Crowser submits this letter and the enclosed documents in response to your Proposal to Add Contaminated Property to DEQ's Confirmed Release List (CRL) and Inventory for the above reference property (ESCI #141) dated November 12, 1999. OSM's comments and the supporting data are provided to update DEQ on the current status of historical environmental issues identified in the Site Summary Report.

This information shows that the site should not be listed on either the CRL or the Inventory as there is not any significant threat to present or future public health, safety or the environment. We also ask that this additional information be used to more accurately characterize the potential threat from the site as evaluated by the Site Assessment Prioritization System (SAPS) score sheet (dated July 30, 1999).

HISTORICAL ENVIRONMENTAL ISSUES

The historical environmental issues cited in the November 12, 1999 letter for the proposed listing included:

- Solvent mixed with paint leaked from drums onto the surface of the ground;
- Landfilled waste paint on-site;

Five Centerpointe Drive, Suite 240
Lake Oswego, Oregon 97035-8652
Fax 503.620.6918
Tel 503.620.7284

- Emission control dust (determined to be characteristic hazardous waste) deposited into a surface impoundment not intended for that purpose;
- Two PCB spills from leaking capacitors and transformers; and
- Two gasoline spills and associated groundwater contamination.

Each one of these historical environmental issues is addressed below.

Solvent Mixed with Paint Leaked from Drums onto the Surface of the Ground. This finding is from an April 15, 1985 compliance inspection conducted jointly by EPA and DEQ. Subsequent to this inspection, a formal closure process was conducted at the waste solvent container area. Documentation for the closure process was reviewed by both EPA and DEQ. The waste solvent container area consisted of waste MEK in sealed drums on a wood pallet situated on a gravel and soil area near the paint storage building at Surface Processing. The container storage area was defined as 36 feet by 20 feet. Appendix A includes the closure plan for the waste solvent container area, a declaration by a professional engineer regarding activities undertaken, and analytical results following soil and gravel removal. Drum handling practices were changed and the sealed drums of waste MEK were placed inside a steel secondary containment pan on a concrete pad. This release requires no further action as it was cleaned up to a level consistent with Oregon Law and poses no significant current or future risk to public health, safety or the environment.

Landfilled Waste Paint On-Site. Previously, paint overspray from Surface Processing was mixed with grease sweep in a solidified form and placed in a drop box for disposal. Historically, this waste was placed in the on-site landfill. Letter Authorization #A-184 was issued by DEQ to permit the disposal of paint waste in the on-site landfill. In 1996, OSM formally closed the on-site landfill with DEQ oversight and obtained a closure permit (Solid Waste Permit #1174) from DEQ. Groundwater data was collected for 2 years and did not exceed the drinking water standards or permit conditions set by the DEQ. A Landfill characterization report and quarterly sampling results are on file with the DEQ Solid Waste Section. Appendix B contains the request for one-time disposal and paint waste analytical data, the letter authorization, the DEQ closure letter for the landfill, and the landfill permit termination following completion of post-closure monitoring. This release was permitted and requires no further action as it poses no significant threat to present or future public health, safety or the environment.

Waste paint (non-hazardous and hazardous waste) is currently shipped off-site for disposal.

Emission Control Dust Deposited into a Surface Impoundment not Intended for that Purpose. Appendix C contains a letter prepared by OSM along with supporting documents that summarize this issue. For a short period of time (June 1980 until March 1981), electric arc furnace (EAF) dust was placed in the Direct Reduction Division (DRD) pond. This occurred prior to the EAF dust being classified as a listed hazardous waste, K061. Subsequent actions included removal of the EAF dust from the DRD pond and two years of groundwater monitoring. Both EPA and DEQ determined that the former DRD pond was administratively closed as a regulatory concern. This decision was based on the removal actions performed, confirmation sampling of the former DRD pond, and groundwater sampling beneath the former pond. Based on the groundwater sampling, there was no evidence that any hazardous constituents had been released from the DRD pond. This release was cleaned up to a level consistent with Oregon law and requires no further action as there is no significant present or future threat to public health, safety, or the environment.

EAF dust is currently shipped off-site for disposal.

Two PCB Spills from Leaking Capacitors and Transformers. In October 1985, a PCB release from a transformer at the oxide plant of the former DRD at OSM was reported to the DEQ. A total of sixteen soil samples were taken to characterize the spill area. PCB soil concentrations ranged from 0.8 to 7.9 mg/kg. Appendix D contains the analytical data characterizing the spill area. Only one sample exceeded the 7.5 mg/kg risk-based protective level for industrial sites (Generic Remedies for Soils Contaminated with Polychlorinated Biphenyls). However, statistical evaluation of these data in accordance with DEQ's 1998 risk assessment guidance (Guidance for Conduct of Deterministic Human Risk Assessments) indicate that the 90% upper confidence limit on the mean is 4.54 mg/kg. Therefore these soils did not pose an unacceptable health risk before cleanup activities were undertaken. Cleanup activities included excavation of contaminated soil for off-site disposal and verification sampling. Excavation of these soils would have further reduced any remaining risks.

In 1991and 1992, OSM removed or retrofilled all transformers containing PCB oil greater than 50 parts per million (ppm). Concrete slabs beneath each transformer and soil adjacent to each transformer was sampled and analyzed for PCBs. Materials containing PCBs higher than 1 ppm were removed for off-site disposal.

These releases were cleaned up to a level consistent with Oregon Law and require no further actions as there is no significant present or future threat to public health, safety, or the environment.

Two Gasoline Spills and Associated Groundwater Contamination. A 500-gallon gasoline spill occurred in the northwest corner of the OSM facility from an aboveground storage tank in use by a contractor to fuel construction vehicles. The release was reported to DEQ (OERS No. 97-2285). Spill response activities included removal of approximately 240 cubic yards of soil impacted by gasoline and its transport to TPS Technologies for thermal treatment. Verification soil samples were obtained and gasoline-range hydrocarbons were not detected in these soil samples. Additional activities have included installation of 8 geoprobes and 5 groundwater monitoring wells and soil and groundwater sampling. Based on soil and groundwater results, source soils with gasoline hydrocarbons have been removed. Dissolved-phase gasoline constituents are present in groundwater. The most recent document on this issue was provided to DEQ in response to your Site Assessment Review Information Request. Based on the data, there is no significant present or future threat to public health, safety or the environment. The site is suitable for closure using a risk-based approach under the independent cleanup pathway. OSM is currently pursuing this approach.

A release from a 5,000-gallon gasoline UST occurred at the pump island adjacent to the UST at the southwest corner of the Rolling Mill building. The release was reported to DEQ (File No. 26-95-248). The UST was decommissioned in January/February 1996. Based on field indications, soil in the UST nest was impacted with gasoline. Groundwater was encountered in the UST excavation at a depth of 2.5 feet below ground surface. A moderate petroleum-like sheen was observed on the groundwater. About 150 tons of soil from the UST nest were excavated and disposed of at OHI's thermal treatment facility. Concentrations of gasoline in excavated soil ranged from 32 mg/kg to 980 mg/kg. Soil samples collected from the excavation sidewalls did not contain detectable concentrations of gasoline-range hydrocarbons. Benzene concentrations remaining in the soil ranged from <0.025 mg/kg to 0.45 mg/kg. Groundwater samples were collected from the UST nest on four occasions. Concentrations of benzene (910 µg/L) and toluene (4,700 µg/L) in the final water sample collected exceeded applicable groundwater cleanup goals at UST sites. Groundwater pumped from the excavation was stored on the site in portable tanks and discharged under a DEQ Special Permit. Samples collected from the discharge water met all applicable discharge criteria.

Groundwater impacts were assessed through the installation and sampling of monitoring wells. The most recent document on this issue was provided to DEQ in response to your Site Assessment Review Information Request. OSM has signed a cost recovery agreement with the UST program and is pursuing closure of this issue with DEQ oversight using the generic remedy risk based closure approach. Since these issues are being addressed under

the UST program, OSM contends it is inappropriate for the site to be listed on the CRL and Inventory.

SITE ASSESSMENT PRIORITIZATION SYSTEM - SCORE SHEET

We also reviewed the Site Assessment Prioritization System (SAPs) score sheet prepared by DEQ on July 30, 1999 for the OSM site. We request that the following items be re-evaluated and the total score re-assessed.

Potential to Release:

1. Hazardous Substance Containment - The facility has a current Spill Prevention Control and Countermeasure Plan, Hazardous Waste Contingency Plan, and Stormwater Pollution Prevention Plan. Infrequently, a spill occurs that is immediately investigated and remedial actions undertaken. There are no active USTs or landfills on the facility. We believe the proper threat under this category is medium not high.

2. Distance to Drinking Water Well - We reviewed the Oregon Water Resources Department Groundwater Information Database for drinking water wells nearest the OSM site. The nearest functioning drinking water well is located over 1 mile from OSM at the Northwest Pipe facility (formerly known as Beall Pipe and Tank Corp). The Midland-Ross Surface Comb. Division drinking water well listed on the database was on OSM property and is no longer in use. Under this criterion, a low rating should be assigned. A medium rating was previously assigned.

3. Soil Permeability - Based on a review of soil boring logs from projects at the site, the surface soils consist of sand and aggregate. The subsurface soils are predominantly sandy silt with silt and sand. We believe the proper threat category is medium, not high. Example boring logs are attached as Appendix E.

Hazardous Substance Characteristics:

1. Water Solubility - Soluble constituents such as volatile organic compounds are currently under investigation with DEQ oversight or through the LUST program or spill response program as described in the historical environmental issues section. We believe the proper threat category is medium, not high.

Evaluator Assessment of Threat. Based on this additional information and using the SAPs scoring guidance, we believe the site should be assigned a medium threat not a high threat.

With these revisions, the total SAPs Score would be 77 and the site would receive a medium rating.

CLOSING

Please review this additional information and re-evaluate the site. If you have any questions regarding this project, please feel free to call us.

Sincerely,

HART CROWSER, INC.

Randi Wexler

RANDI WEXLER
Senior Associate, Regulatory Specialist

HERBERT F. CLOUGH, P.E.
Principal

Attachments: Appendix A - Waste Solvent Area Documentation
Appendix B - Waste Paint Area Documentation
Appendix C - DRD Pond Documentation
Appendix D - 1985 PCB Soil Characterization Analytical Data
Appendix E - Example Boring Logs

APPENDIX A
WASTE SOLVENT AREA DOCUMENTATION

Engineers
Planners
Economists
Scientists

August 29, 1985

P8100.43

Oregon Steel Mills
P.O. Box 2760
Portland, Oregon 97208

Attention: Mr. Thomas C. McCue
Environmental Engineering Manager

Gentlemen:

Attached is our declaration to fulfill the requirements of 40 CFR 265.115 and, if applicable, 40 CFR 264.115.

If you have any questions or if we can be of further assistance, please call.

Sincerely,

CH2M HILL NORTHWEST, INC.

Richard G. Crim

Richard G. Crim, P.E.
Geotechnical Engineer

Attachment

Engineers
Planners
Economists
Scientists

DECLARATION

With respect to the solidified paint waste at the Gilmore Steel Corporation, Oregon Steel Mills Division, in Portland, Oregon, the undersigned declares that, based on his personal observations, review of records, and documentation, and in his professional engineering judgment and opinion and to the best of his knowledge, the following steps described in the attached closure plan have been performed:

1. Container storage equipment has been removed.

2. The soil was tested in a grid pattern at six points.

3. Gravel and soil were removed in the area adjacent to the concrete pad.

4. Sampling was performed after soil and gravel were removed. Based on results from Coffey Laboratories, Inc., Log #A850826-A, all samples tested indicate a concentration of methyl ethyl ketone of less than one part per million.

5. Excavated soil and gravel was placed in drums and manifested for shipment to a permitted hazardous waste landfill.

6. The excavated area was backfilled with clean gravel.

This declaration does not constitute any warranty, express or implied.

REGISTERED PROFESSIONAL ENGINEER
12.149
OREGON
JULY 15, 1963
RICHARD G. CRIM

Signed,

Richard G. Crim

Richard G. Crim, P.E.

August 29, 1985
Date

CLOSURE PLAN

The following plan meets the requirements of 40 CFR 265 and 264 for the closure of a Container Storage Area and includes the comments submitted by the Oregon Department of Environmental Quality in their August 15, 1985 dated letter.

Coating Department: Container Storage of Methyl Ethyl Ketone (MEK)

Steps:

1. Remove all container storage equipment including empty and/or partially full barrels, pallets, funnels, etc.

2. Test soil in a grid pattern along the west side of the concrete pad at six (6) points.

3. Pending the outcome of the sample analysis, remove sufficient gravel and soil in the area adjacent to the concrete pad to ensure a clean up level to background is achieved.

4. The level of background will be acheived when sample analysis of the soil indicate a Methyl Ethyl Ketone (MEK) concentration of one part per million (1 PPM) or less. This concentration meets or exceeds the level of detection standard in EPA's Analysis Test Method #8015 outlines in EPA publication Test Methods for Evaluating Solid Waste, SW 846, July, 1982.

5. Excavated gravel and soil removed will be placed DOT 17 E Barrels and disposed of in a permitted Hazardous Waste Landfill.

6. The excavated area will be backfilled with clean gravel.

7. The closure will be certified by Gilmore Steel Corporation, Oregon Steel Mills Division and an Independent Registered Professional Engineer as specified in 40 CFR 265.115 and 264.115.

8. Laboratory Analysis will be performed and certified by an outside independent laboratory using the above test method specified by Oregon Department of Environmental Quality.

COFFEY LABORATORIES, INC.
4914 N.E. 122nd Ave.
Portland, OR 97230
Phone: (503) 254-1794

August 26, 1985
Log #A850822-C

Oregon Steel Mills
P.O. Box 2760
Portland, Oregon 97208

Attention: Tom McCue

Analysis Requested: Methyl Ethyl Ketone

Sample ID: Dirt

CLIENT ID	RESULTS
1	< 1.0
2	< 1.0
3	< 1.0
4	3.6
5	< 1.0
6	< 1.0

< denotes "less than"

Results in mg/Kg.

Sincerely,

Susan M. Coffey
President

SMC/gs

COFFEY LABORATORIES, INC.
4914 N.E. 122nd Ave.
Portland, OR 97230
Phone: (503) 254-1794

August 27, 1985
Log #A850826-A
RETEST REPORT

Oregon Steel Mills
P.O. Box 2760
Portland, Oregon 97208

Attention: Tom McCue

Analysis Requested: Methyl Ethyl Ketone

Sample ID: Dirt

CLIENT ID		RESULTS
1		< 1.0
2		< 1.0
3		< 1.0
4	A*	< 1.0
	B**	< 1.0
5		< 1.0
6		< 1.0

< denotes "less than"

Results in mg/Kg.

A* Before Cleanup
B** After Cleanup

Sincerely,

Susan M. Coffey
President

SMC/gs

OREGON STEEL MILLS

P.O. Box 2760
Portland, Oregon 97208
Phone (503) 286-9651

January 29, 1986

Ms. Catherine Massimino
U.S. ENVIRONMENTAL PROTECTION AGENCY
Region 10 M/S 533
1200 Sixth Avenue
Seattle, Washington 98101

Dear Cathy:

Thank you for your telephone call yesterday, reminding me that certain information regarding the closure of a container storage area is due. Enclosed with this letter is a blue print with the waste solvent container area outlined and an informational submittal responding to the five (5) items requested in the Charles E. Finley letter of November 20, 1985.

If further information is needed for your evaluation of the closure, please contact me at (503)286-9651.

Sincerely,

Thomas C. McCue

Thomas C. McCue
Environmental Manager

Enclosure

TCM:jp

ATTACHMENT Z

i. A drawing is enclosed which identifies the Waste Solvent Container Area, Sampling Grid, the Sampling Points, and the location of the soil which was removed.

ii. The Sampling Method was devised to obtain a series of Sampling Points radiating outward from an observed spill of paint and/or Methyl Ethyl Ketone (MEK). The Spill Area was contained by a concrete pad on the east side, therefore, sample points were chosen on the three (3) remaining sides as well as the actual spill point. This sampling method was described as a Sampling Grid consisting of six (6) points in the closure plan submitted to Oregon Department of Environmental Quality and was approved prior to execution.

iii. The sampling procedure was developed to obtain representative samples by:

1. Excavation to a six (6) inch depth at each sample point.

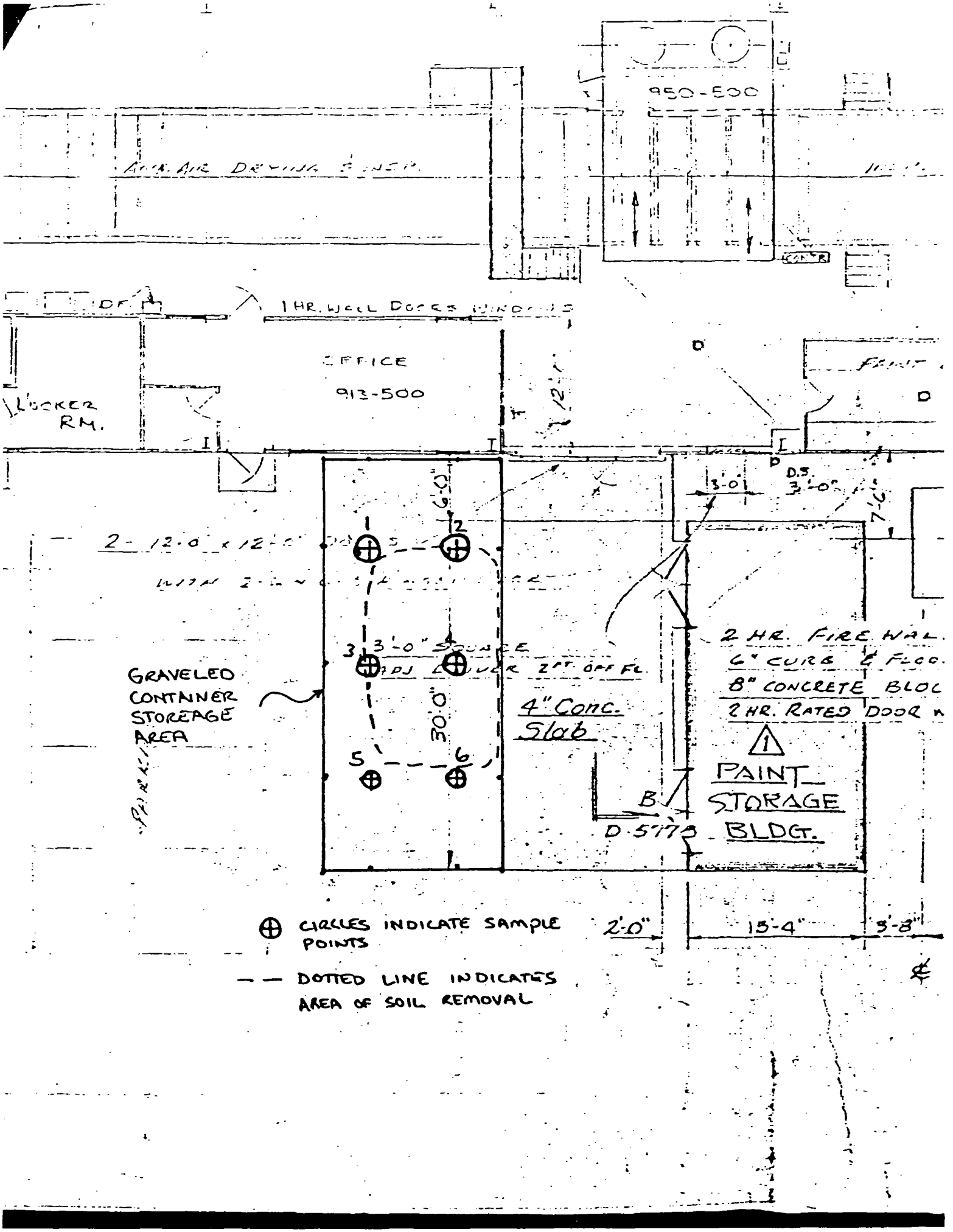
2. Collect soil and gravel samples at each point with a hand trowel.

3. Samples were placed directly into clean clear glass sample bottles and sealed with aluminum foil and screw top lids.

4. The sealed sample bottles were placed into a covered cardboard box for protection from ultraviolet light and transported to Coffey Laboratories to be refrigerated until analyzed.

iv. A Spill Area was observed and sampled according to Section ii above.

v. The Independent Professional Engineer observed each step of the Closure Plan as performed and attested to in the Declaration Document provided to EPA, August 29, 1986. The Independent Professional Engineer was chosen to oversee the closure operation because of his previous experience as a Contract Supervisor overseeing clean up operations for two (2) years for EPA at the Love Canal Site.


950-500
1 HR. WALL DOORS WINDOWS
OFFICE
913-500
LOCKER RM.
12'-0"
6'-0"
3'-0"
D.S.
3'-0"
7'-6"
2 - 12'-0" x 12'-0"
3'-0" SQUARE
30'-0"
GRAVELED CONTANNER STOREAGE AREA
4" Conc. Slab
2 HR. FIRE WALL
6" CURB & FLOOR
8" CONCRETE BLOCK
2 HR. RATED DOOR
1
PAINT STORAGE BLDG.
B
D.S.
CIRCLES INDICATE SAMPLE POINTS
DOTTED LINE INDICATES AREA OF SOIL REMOVAL
2'-0"
15'-4"
3'-8"

APPENDIX B
WASTE PAINT AREA DOCUMENTATION

OREGON STEEL MILLS

P.O. Box 2760
Portland, Oregon 97208
Phone (503) 286-9651

June 3, 1986

RECEIVED
JUN 5 1986
DEPT. OF ENVIROMENTAL QUALITY

Mr. Edward Woods
Northwest Region
Department of Environmental Quality
P.O. Box 1760
Portland, OR 97207

RE: **One Time Disposal of Solid Waste**

Dear Mr. Woods:

To confirm our previous telephone conversations, we are requesting approval to leave certain solid wastes in place for disposal on-site rather than disposal at the St. John's Landfill. The solid waste is described as paint waste "B" and has been analyzed for total metals, extraction procedure toxicity metals, and methyl ethyl ketone the only significant solvent. Paint waste "A" is the currently produced paint waste and will be handled in a different manner.

We propose a one-time disposal of up to four hundred (400) cubic yards of paint waste "B" on-site. We have disposed of all paint wastes generated since August 1984 in an off-site permitted landfill authorized by a special waste disposal permit as you requested. Due to the quantity and the inert quality of this paint waste material, a one-time disposal approval seems appropriate.

Thank you for your consideration.

Sincerely,

Thomas C McCue

Thomas C. McCue
Environmental Manager

Enclosures

COFFEY LABORATORIES, INC.
4914 N.E. 122nd Ave.
Portland, OR 97230
Phone: (503) 254-1794

May 28, 1986
Log #A860514-B
PO#: 100

Oregon Steel Mills
P.O. Box 3760
Portland, Oregon 97208

Attention: Tom McCue

Analysis Requested: E P Toxicity Test.

Sample ID: #1 - Paint Waste A, 5-13-86
#2 - Paint Waste B, 5-13-86

Sample Description: Paint Waste

Method of Analysis: Federal Register/Vol.45, No.98/Monday, May 19, 1980/ Rules and Regulations; Appendix II, Page 33127

Field Data: Samples were collected and delivered by the Client

ANALYSIS	SAMPLE #1	SAMPLE #2	Limit
Arsenic	< 0.05	< 0.05	5.0
Barium	26.50	3.52	100.0
Cadmium	0.16	0.13	1.0
Chromium	0.48	< 0.05	5.0
Lead	0.51	0.75	5.0
Mercury	< 0.05	< 0.05	0.2
Selenium	< 0.05	< 0.05	1.0
Silver	< 0.05	< 0.05	5.0

< *denotes "less than"*

Results expressed in mg/liter unless otherwise specified.

REPORT CONTINUES

This report is for the sole and exclusive use of the above client. Samples are retained a maximum of 15 days from the date of this letter.

COFFEY LABORATORIES, INC.
4914 N.E. 122nd Ave.
Portland, OR 97230
Phone: (503) 254-1794

May 28, 1986
Log #A860514-B
PO#: 100

Oregon Steel Mills
Page Two
Attention: Tom McCue

Analysis Requested: Total Metals

Sample ID: #1 - Paint Waste A, 5-13-86
#2 - Paint Waste B, 5-13-86

Sample Description: Paint Waste

ANALYSIS	SAMPLE #1	SAMPLE #2
Arsenic	< 10.00	< 10.00
Barium	761.2	3754
Cadmium	6.77	27.64
Chromium	1532	915.3
Lead	190.9	552.6
Mercury	< 0.05	< 0.05
Selenium	< 0.05	< 0.05
Silver	< 5.0	< 5.0
Methyl Ethyl Ketone*	14	1.4

Results in mg/kg

< denotes "less than"

* Analysis by extraction GC/FID and comparison with solutions of standards.

Sincerely,

Susan M. Coffey
President

SMC/ge

This report is for the sole and exclusive use of the above client. Samples are retained a maximum of 15 days from the date of this letter.

VICTOR ATIYEH
Governor

Department of Environmental Quality

522 S.W. FIFTH AVENUE, BOX 1760, PORTLAND, OREGON 97207 PHONE: (503) 229-5696

June 23, 1986

Mr. Thomas C. McCue
Oregon Steel Mills
P. O. Box 2760
Portland, OR 97208

Re: Multnomah Co. - SW
LETTER AUTHORIZATION #A-184

Dear Mr. McCue:

This is in response to your request for a one time permit to put paint wastes in an existing landfill on your plant site. Your analysis of the paint wastes indicates that those wastes do not meet the definitions of hazardous wastes. Therefore, the Department hereby authorizes the disposal of the paint wastes on site subject to the following conditions:

1. The wastes shall be added to the existing landfill on your plant site.

2. The wastes added to the landfill should be the paint wastes characterized by the test results submitted with your request.

3. The amount of wastes shall not exceed 400 cubic yards.

4. At least 2 feet of cover shall be installed over the waste piles.

5. The wastes shall not be deposited at levels lower than the existing water table.

6. This authorization expires 6 months from the date of this letter.

If you have any questions, please contact me at 229-5296.

Sincerely,

Edward G. Woods
Senior Environmental Analyst
Northwest Region

EGW:m
SM350
cc: Solid Waste Section

Mark FYI
DREW

Oregon

DEPARTMENT OF
ENVIRONMENTAL
QUALITY

Western Region -
Salem Office

JAN 3 0 1996

Andrew J. Gilpin
Manager, Environmental Services
Oregon Steel Mills, Inc.
P.O. Box 2760
Portland, OR 97208-0363

Re: Solid Waste Landfill
SW Permit No. 1174
Multnomah County

Dear Mr. Gilpin:

We have reviewed and accept the Landfill Closure Construction Report, November 30, 1995, as the construction certification required by OAR 340-93-150. Based on the certification we consider the landfill to be closed.

The construction report was very well presented.

If you have any questions, please call Fred Bromfeld, of my staff, at tel: 229-6210, Portland.

Sincerely,

Charles W. Donaldson
Manager, Solid Waste Permits
Northwest Region

cc: Fred Bromfeld, NWR
Herb Clough, Hart Crowser

OSM011811

750 Front St. NE
Suite 120
Salem, OR 97310
(503) 378-8240
(503) 378-3684 TTY

J-5514-07

HART CROWSER INC.

JUN 25 1997

Portland Office

Oregon

DEPARTMENT OF ENVIRONMENTAL QUALITY

Western Region - Salem Office

Andrew J. Gilpin
Manager, Environmental Services
Portland Steelworks
Oregon Steel Mills, Inc.
P.O. Box 2760
Portland, OR 97208-0363

JUNE 23, 1997

Re: Solid Waste Landfill
SW Permit No. 1174
Multnomah County

Dear Mr. Gilpin:

This is in response to Hart Crowser's letter on your behalf of April 30, 1997, requesting that Solid Waste Disposal Site Closure Permit No. 1174 be terminated.

Enclosed is an evaluation of the request by Fred Bromfeld, of my staff. His determination is that pursuant to OAR 340-95-050(5), the permit may be terminated as the subject landfill poses no threat to human health or the environment and requires no further solid waste activity.

As such, Solid Waste Disposal Site Closure Permit No. 1174 is hereby terminated.

Sincerely,

Charles W. Donaldson
Manager, Solid Waste Permits
Northwest Region

cc: Fred Bromfeld, NWR
Herb Clough, Hart Crowser

750 Front St. NE
Suite 120
Salem, OR 97310
(503) 378-8240
(503) 378-3684 TDD

DEQ/WVR-101 1-91

PERMIT TERMINATION REPORT

OREGON STEEL MILLS, INC.
P.O. BOX 2760
PORTLAND, OR 97321

Report By: Fred Bromfeld

Prepared: June 23, 1997

SW LANDFILL
SW PERMIT NO. 1174
MULTNOMAH COUNTY

By an April 14, 1997, letter from its consultant, Oregon Steel Mills requested that the Department terminate the permit for the closed landfill at its Rivergate mill.

Background

The landfill is small and in a remote corner of the mill site. It was permitted on July 31, 1995, several years after its last use, at the request of Oregon Steel and to enable the Department to monitor the impact of the landfill on groundwater. Attachment 1 gives more complete background.

Evaluation

A review of an April 29, 1997, report of 9 sampling events, indicated a slight, though statistically significant increase in arsenic, iron, and manganese in the shallow groundwater beneath the landfill. But, given the landfill's location [groundwater] downstream of most of the mill facilities, its impact on the already impacted groundwater is not deemed to be significant. As such, further monitoring is unwarranted.

I also inspected the landfill site on June 19, 1997. The top cover is 18" compacted aggregate and appears unchanged from its condition at closure. Oregon Steel uses it as a storage area.

Recommendation

It is recommended that the permit be terminated as provided by OAR 340-95-050(5) since the site poses no threat to human health or the environment and:

1. There is no need for active supervision of the site.

2. There is no need for maintenance at the site.

3. There is no need for the maintenance or operation of any system or facility at the site.

Attachment

Attachment 1

PERMIT EVALUATION REPORT

OREGON STEEL MILLS, INC.
P.O. BOX 2760
PORTLAND, OR 97321

SW LANDFILL
SW PERMIT NO. 1174
MULTNOMAH COUNTY

Report By: Fred Bromfeld
Nancy Sawka

Prepared: May 15, 1995
Revised: July 3, 1995

Background

Oregon Steel Mills, Inc. (OSM) operates a steel mill that manufactures carbon steel from scrap and additives in an electric arc furnace. The mill is located on the eastern bank of the Willamette River in the Rivergate industrial area of north Portland, Oregon.

The subject 3 acre landfill is located in the northwest corner of the mill property about 100 feet from the Willamette River. The landfill was operated between 1975 and 1990 but this is the initial permit since the disposed wastes were considered inert and exempt from regulation during the time of its operation.

The disposed wastes are primarily mullite (a clay), ceramic refractory, furnace slag, and mill scale. In a September 30, 1992, RCRA Preliminary Assessment, EPA determined the landfill to be a solid waste management unit.

Cover Evaluation

On January 19, 1995, OSM submitted an application to the Department requesting that the landfill be closed under a closure permit. Also received were a Landfill Site Characterization, July 2, 1993, and a Landfill Closure Plan, April 3, 1995, Revised May 10, 1995.

The plan for the landfill cover is satisfactory and is incorporated into the permit.

Groundwater Evaluation

An extensive amount of waste and groundwater characterization work has been completed at this facility as part of the RCRA Preliminary Assessment (PA), the landfill site characterization study (SCS), and for the closure plan. In addition to the process waste discussed above, a one-time disposal of non-hazardous paint wastes was allowed in the landfill sometime after June 1986.

These paint wastes tested as non-hazardous, but contained sufficient concentrations of some trace metals to be viewed as a potential environmental concern should leaching of the wastes occur.

The groundwater flow at the site is towards the Willamette River. The potential receptors of a leachate release, should one occur, are the groundwaters beneath and downgradient of the landfill, and the Willamette River to the west.

The landfill has an existing monitoring well network consisting of two downgradient wells, one upgradient well, and one cross gradient well. These wells were installed as part of the SCS. Waste characterization data and groundwater analytical results presented in the SCS and closure reports, indicate that the main constituents of concern are trace metals including arsenic, barium, cadmium, chromium, lead, nickel, and zinc. Most of these constituents were detected in the wastes and/or the groundwater. The metals in the groundwater were not detected above the federal or state standard, but most did exceed the concentrations found in the upgradient well.

The permit requires quarterly groundwater monitoring of the existing monitoring wells for the constituents of concern. With the completion of closure activities, the potential for leachate generation and release should be minimized. After two years of quarterly groundwater monitoring, the site should be re-evaluated to determine if the closure efforts have been effective in reducing the concentrations of metals in the groundwater. VOC and semi-VOC analyses are not included in the groundwater monitoring requirements of the permit because these constituents are not expected to pose an environmental threat based on the data collected to date. However, VOCs and semi-VOCs should be sampled by the DEQ laboratory during the first split sampling event to confirm the previous groundwater sampling results.

A water well inventory is also required in the permit since a detailed survey was not completed or provided in previous reports.

The permit was put on public review June 1, 1995. No comments were received.

Recommendation

It is recommended that the draft permit be issued as proposed.

APPENDIX C
DRD POND DOCUMENTATION

OREGON STEEL MILLS

P.O. Box 2760
Portland, Oregon 97208-2760
Phone (503) 286-9651

September 3, 1999

Mr. Charles Clinton
Manager, Hazardous Waste Technical Assistance and Compliance
Oregon Department of Environmental Quality
Northwest Region
2020 SW Fourth Avenue, Suite 400
Portland, OR 97201-4987

Re: Closure of Issues Related to Former DRD Pond

Dear Chuck:

This letter is in response to your inquiry about the final resolution/closure of the former Direct Reduction Division ("DRD") storage pond located at the Oregon Steel Mills' ("OSM") facility. I apologize for the delay in getting back to you, the former DRD pond has a long (and at this point, dated) history and it took some time locating the relevant documents.

It appears from my review of the files that the regulatory issues associated with the DRD pond were the subject of discussions between Gilmore Steel Mills ("Gilmore") (now OSM), the U.S. Environmental Protection Agency ("EPA"), and the Oregon Department of Environmental Quality ("DEQ") from 1980 until 1987. By 1987, after Gilmore had removed all the material from the DRD pond, and had demonstrated through sampling and analysis that the DRD pond was not a source of potential contamination, both EPA and DEQ considered the issue closed. Below I have provided you a brief narrative of the history and resolution of the DRD pond. I have also enclosed relevant documents and correspondence relating to the DRD pond.

As you may recall, Gilmore used the former DRD pond for many years for storing iron ore used in the manufacture of steel. For a short period of time, from approximately June 1980 until March 1981, Gilmore placed electric arc furnace dust ("EAF") into the DRD pond. At about this same time, the EPA promulgated regulations under the Resource Conservation and Recovery Act ("RCRA") defining emission control dust from the electric furnace production of steel as a listed hazardous waste. The listing of K061 as a hazardous waste began what turned out to be a long and often convoluted series of discussions about the regulation and appropriate management of the material located in the pond.

For purposes of your inquiry about the ultimate resolution of the matter, I will skip a significant portion of the early DRD pond history and instead, focus on describing how the

resolution and closure of the former DRD pond was achieved. In chronological order, important milestones relating to the pond closure are as follows:

1. In March 1983, EPA and the Oregon Department of Environmental Quality ("DEQ") conducted a joint inspection of the Gilmore facility. The inspection report prepared by DEQ did not identify any violations at the facility, and stated that once the EAF dust was removed from the DRD storage facility, Gilmore would not be considered a treatment, storage, and disposal ("TSD") facility.

2. Between May 7, and May 10, 1984, Gilmore removed the EAF dust, the K061 listed waste, from the pond (a total of approximately 413 tons), and manifested it to the RCRA-permitted Subtitle C disposal site in Arlington, Oregon.

3. In July 1985, EPA determined that the materials remaining in the DRD pond (iron ore) would not be considered a solid waste under EPA's recycling rules if 75 percent of the iron ore remaining in the pond was removed and recycled by December 31, 1985.

4. Beginning in July 1984, Gilmore conducted groundwater monitoring in the area surrounding the DRD pond and submitted the results to EPA. All of groundwater monitoring data from 1984 through 1986 show that no substances of concern exceeded EPA's safe drinking water standards.

5. In November 1985, EPA wrote a letter to Gilmore stating that EPA had concluded that there was no evidence that any hazardous constituents had been released from the DRD pond. EPA also stated in this letter that Gilmore was not required to have either interim TSD status or a RCRA permit, or to file a closure plan, with respect to the DRD pond and that the DRD pond did not present any further RCRA issues.

6. On October 29, 1986, consistent with EPA's conclusions regarding the DRD pond, DEQ wrote Gilmore granting its permission to proceed with the leveling of the site and to discontinue groundwater monitoring because all of the iron ore materials had been removed and because the analytical data on the materials removed from the DRD pond demonstrated that the material did not contain any hazardous constituents of concern.

In sum, by 1987, both EPA and DEQ had determined that the former DRD pond was administratively closed as a regulatory concern based on the removal actions performed by Gilmore and Oregon Steel and based upon confirmation sampling of the former DRD pond and of the groundwater underneath the former DRD pond, both indicating that the former pond had not been a source of a release of hazardous substances.

As recently as August 1992, an EPA contractor conducted a RCRA Preliminary Assessment of the Gilmore facility. Although the EPA contractor identified the former DRD pond as a solid waste management unit, it recommended no further investigation or action with respect to the former DRD pond,

I have enclosed for your files the following documents:

1. Memorandum from the Director of Environmental Quality Commission ("EQC") to EQC regarding Agenda Item K for the January 31, 1986, EQC Meeting- "Request for Variance from Gilmore (Oregon) Steel from Classification as Solid Waste Certain Iron Ore Material." Attachments 1 through 4 to Agenda Item K.

2. Letter dated May 7, 1985, from Thomas C. McCue, Environmental Manager, for OSM, to Kenneth D. Feigner, Chief, Waste Management Branch of the EPA regarding Groundwater Data Submittal transmitting the fourth submittal of Groundwater Analysis and the Groundwater Elevation Data for all 15 well points.

3. Letter dated September 9, 1985, from Mr. McCue to Mr. Feigner transmitting the second submittal of Groundwater Analysis and the Groundwater Elevation Data.

4. Letter dated November 20, 1985, from Charles E. Findley, Director, Hazardous Waste Division, EPA, to Thomas B. Boklund, President, Gilmore in response to Gilmore's letters of August 29, and September 30, 1985, as to the handling of the DRD pond material.

5. Interoffice Memo dated July 1, 1986, from Brett McKnight of DEQ to File thru Neil Mullane regarding HW CEI Inspection Review.

6. Letter dated July 29, 1985, from Mr. Feigner of EPA to Mr. McCue of Gilmore regarding a follow-up to meeting held on June 4, 1985, and major issue being the redefinition of solid waste promulgated by EPA on January 4, 1985, on the past and present hazardous waste activities at Gilmore's Portland, Oregon, facility.

7. Letter dated July 23, 1986, from Mr. McCue to Mr. Feigner transmitting the fifth submittal of Groundwater Analysis and Groundwater Elevation Data (not included).

8. Letter dated July 30, 1986, from Mr. McCue to Ms. Gillaspie regarding documentation of iron ore removal for recycling or reuse.

9. Letter dated August 28, 1986, from Richard C. Bird, Manager, Process Engineering, OSM, to Ms. Gillaspie regarding removal of all of the material in the DRD Ore Storage Facility from our property for recycling.

10. Letter dated October 13, 1986, from Mr. Bird to Chuck Rice of EPA regarding request to terminate monitoring pursuant to the Consent Order entered into on February 8, 1985.

11. Letter dated October 22, 1986, from D. Henry Elsen, Assistant Regional Counsel, EPA, to Marvin B. Durning, counsel for Gilmore, in response to his letter of September 29, 1986, and OSM's letter of October 13, 1986, to Charles Rice of EPA regarding activities at the DRD ore storage/disposal unit at its Portland, Oregon, facility.

12. Letter dated October 23, 1986, from Mr. Bird to Mr. Rice regarding removal of last few cubic yards of iron ore from the Ore Storage Facility and placed it in with the small amount of material at the rail head which is being shipped to a cement manufacturer for recycling into cement and request for prompt approval to push in the dykes, etc. as per letter of October 13, 1986.

13. Letter dated October 29, 1986, from Edward Woods, Senior Environmental Analyst, Northwest Region, DEQ, to Mr. Bird regarding confirmation of all material having been removed and permission to level the storage facility and discontinue groundwater monitoring program.

14. Letter dated December 18, 1987, from Mr. Bird to Ms. Gillaspie regarding removal of all iron ore and shipment to Canada Cement LaFarge, Ltd., or to Ash Grove Cement West, Inc., for use in the manufacture of cement.

15. Letter dated September 30, 1992, from Kathryn Gladden, Work Assignment Manager, Science Applications International Corporation, to Deborah Robinson of EPA transmitting final RCRA Preliminary Assessment report along with page 23 of that report.

OSM has considered the former DRD pond a closed issue for many years. I trust this letter and the accompanying enclosures allow you to close your file on this issue too.

Please call me if you have any questions regarding the former DRD pond.

Sincerely,
OREGON STEEL MILLS, INC.

ANDREW J GILPIN
Manager, Environmental Services
Portland Steelworks

AJG:P-S:d-r

Enclosures

Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207

522 SOUTHWEST 5th AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item K , January 31, 1986, EQC Meeting

Request for Variance from Gilmore (Oregon) Steel from Classification as Solid Waste Certain Iron Ore Material

Background

Gilmore Steel operates a steel rolling mill in the Rivergate district of north Portland. The facility is also known as Oregon Steel.

The company combines scrap iron and various alloys to produce steel. The mill was built in 1970. The company had used an impoundment to store iron oxide ore. The iron ore pond is about 310 feet by 390 feet and 19 feet deep, and is located south of the main mill, adjacent to the Willamette River. To control air pollution, the company uses a baghouse.

In May of 1980, the company started using recycled scrap iron to replace iron ore in its steel making process. This caused some contaminants from scrap iron (lead, cadmium and chromium) to be generated in the steel making process. The contaminants were collected in the baghouse. The baghouse dust was deposited in the iron ore storage pond from May of 1980 until March, 1981.

Under current state and federal Resource Conservation & Recovery Act (RCRA) hazardous waste regulations, baghouse dust from the primary production of steel in electric furnaces is a listed waste (#K061, Emission Control Dust/Sludge).

Disagreements between EPA, DEQ and Gilmore Steel over the proper regulatory handling of the material in the iron ore pond delayed disposition of the material for several years.

A regulatory light-through-the-tunnel appeared with EPA's revision of the hazardous waste rules to exclude legitimate recycling or reuse from hazardous waste regulations. EPA promulgated these rules January 4, 1985; they were adopted by reference by the Environmental Quality Commission on

PETITION BEFORE THE STATE OF OREGON
DEPARTMENT OF ENVIRONMENTAL QUALITY

Subject: Petition by Gilmore Steel Corporation to exclude a material (assumed to be a waste for purposes of the petition) at its Oregon Steel Mill Rivergate facility from status as a hazardous waste under the Oregon Hazardous Waste Management Program.

Introduction

Gilmore Steel Corporation petitions the Oregon Department of Environmental Quality (DEQ) to exclude from status as a hazardous waste, a mixture of iron ore and emission control dust now found in the asphaltic lined iron ore storage facility at its Rivergate plant in Portland, Oregon. The material is 99.92% iron oxides by weight and 0.08% other metals (lead 0.076%, cadmium 0.002%).

Gilmore Steel believes that the material is not a waste at all but is a mixture of a raw material and a by-product of manufacturing which is beneficially reuseable. This petition is presented out of an abundance of caution and to cooperate with regulatory authorities as far as possible. For purposes of this petition, Gilmore Steel, therefore, asks that DEQ assume the material to be subject to its hazardous waste management program and grant this petition to remove it from that status.

By this petition, and Oregon's interim authorization it is requested and understood that the action of the Environmental Quality Commission will be pursuant to both the Oregon and federal hazardous waste management programs. With this understanding, the petition refers only to the Oregon program.

OBJECTIVE

The purpose of this petition, requesting exclusion of materials which are currently in the ore storage pond from the Oregon Hazardous Waste Management Program at Gilmore Steel Corporation, is to demonstrate under OAR 340-101-003 (5)- (a) & (b) that the mixture of these materials no longer exhibits the characteristics of a hazardous waste as defined in OAR 340-101-Subdivision C. Subsequent to original EP toxicity submittals and interpretation by EPA on the characteristics of these materials, substantial quantities of the emission control dust have been removed and disposed of at Chem Securities System Inc.'s Class 1 landfill in Arlington, OR.

The technical basis for this petition has been developed from the collection and analysis of unbiased randomly distributed samples, which show that the material no longer exhibits EP Toxicity (per OAR340-101-024), and is not, therefore by definition, a hazardous waste. The remainder of this petition is organized in a one-to-one correspondence with the OAR 340-100-020 & 022 requests for information to justify the exclusion of this material.

PETITION BEFORE THE STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

SUBJECT: REQUEST BY GILMORE STEEL CORPORATION FOR THE DECLASSIFICATION OF MIXTURE CONTAINING HAZARDOUS CONSTITUENTS.

Gilmore Steel Corporation requests the Oregon Department of Environmental Quality Quality (DEQ) to exclude from regulation a mixture of iron ore and emission control dust from the secondary production of steel by the Electric Arc Process (EAF dust). The exclusion is requested on the basis that the mixture is not characteristic of a waste, is not a listed waste, and is exempted because it is a mixture of a raw material and a reusable by-product. No new material is being added to the stored material and the use and re-use of the material is dependent upon declassification of the mixture.

OAR 340-100-020 (2)

(a) Gilmore Steel Corp
Oregon Steel Mills Division
14400 N. Rivergate Blvd.
Portland, OR 97203

(b) Oregon Steel Mills (OSM) is owner and operator of an iron ore storage facility consisting of an asphaltic lined pond containing 47,610 tons of iron ore and oxide of iron. Within this mixture are minimal amounts of metal oxides of lead and cadmium which may therefore be subject to Oregon and federal hazardous waste regulations. However, at this time, it is in the interest of OSM to remove these process materials for recycling to a steel making facility to allow for other use of the land.

(c) To facilitate this plan, Oregon Steel Mills proposes that the ODEQ approve this petition to exclude the contents of the ore storage facility from status as a hazardous waste under the Oregon hazardous waste management program, because chemical analyses show that the mixture is not a characteristic waste as defined in OAR Sub Division D of Division 101 (340-101).

SUGGESTED STAFF/COMMISSION WORDING

"It is the opinion of the (staff/commission) that the material contained within the asphaltic lined storage facility at the Oregon Steel Mill's property of Gilmore Steel does not meet the pertinent criteria set out in OAR 340-101-003 for classification as a hazardous waste and is excluded from the provisions of the Oregon Hazardous Waste Management Programs.

The (staff/commission) believes that the samples collected were nonbiased and adequately represent any variations which may occur in the waste petitioned for exclusion.

OAR 340-100-020 (2)

The (staff/commission) has also reviewed the groundwater data and leachate collection analysis data submitted in this petition and submitted separately and found no migration of hazardous constituents into the groundwater or environment from this storage facility. In addition, the (staff/commission) has reviewed the petitioned material by the Vertical and Horizontal Spread (VHS) model developed by EPA and proposed in the Federal Register/Vol.50, No. 38/Tuesday, February 26, 1985/pages 7896-7900. This analytical model assumes a reasonable worst case land disposal scenario including generation of a leachate, migration of the leachate to an underlying groundwater aquifer and migration of the contaminated groundwater aquifer to a nearby drinking water well.

If these materials were to be disposed of in an offsite landfill, the VHS model predicts the potential of hazardous constituents to migrate from the landfill. The (staff/commission) has found that, based on the VHS model, the potential for contaminant migration at a 95% confidence interval for lead, cadmium, and chromium would not exceed the primary drinking water standards for those constituents at the nearest reception well (per EPA, reception well is chosen to be 500 feet away).

The (staff/commission) believes that the material contained in the asphaltic lined storage facility is non-hazardous for all reasons, and, as such, should be excluded from hazardous waste control."

Resolution:

The Environmental Quality Commission of the State of Oregon hereby grants the petition of the Gilmore Steel corporation and excludes from status as a hazardous waste under the Oregon Hazardous Waste Management Program the approximately 47,610 tons of material in the ore storage facility at Gilmore Steel's Rivergate, Portland facility as more particularly described in this petition.

OAR 340-100-020 (2) Continued

d) The proposed declassification (delisting) is required to facilitate recycle of these materials by removal from the site. OSM requests that the petition should be approved on the basis that the mixture is not hazardous and passes all required testing methods for hazardous classification (OAR 340-101). The declassification (delisting) petition should also be approved on the basis that the mixture poses no threat to public health or the environment. Even though the mixture is not, as noted above, a characteristic waste, the approval of the petition will allow for its complete removal from the site.

The following evidence is offered in support of this petition.

(1) Extraction Procedure Toxic Test Method Results

ELEMENT	OSM MIXTURE*, mg/l	OAR/EPA STD, mg/l
ARSENIC	< 0.05	5.0
BARIUM	0.39	100.0
CADMIUM	0.43**	1.0
CHROMIUM	< 0.05**	5.0
LEAD	4.21**	5.0
MERCURY	< 0.05	0.2
SELENIUM	< 0.05	1.0
SILVER	< 0.05	5.0

* OSM mixture results from a weighted composite resulting from 25 full depth core samples selected on the basis of a computer based statistically random selection program. The OSM mixture falls below the standards set by the Environmental Protection Agency and adopted by the State of Oregon for classification as a hazardous material.

** Elements of concern for classification as a hazardous material.

OAR 340-100-020 (2)(d) Continued

(2) At the demand of EPA, groundwater monitoring test results were completed for three down-gradient wells. All analyses showed compliance with the requirements of OAR 340-105 Subpart F, as an example, Data for well OSM-2 are shown below:

ELEMENT	OSM 2 Sampling Run	EPA Primary Drinking Water Std
ARSENIC	0.005	0.05
BARIUM	< 0.1	1.0
CADMIUM	< 0.001	0.01
CHROMIUM	< 0.001	0.05
FLORIDE	0.8	1.4-2.4
LEAD	< 0.01	0.05
MERCURY	< 0.001	0.002
NITRATE	< 0.05	10.0
SELENIUM	< 0.005	0.01
SILVER	< 0.002	0.05
ENDRIN	< 0.02	0.0002
LINDANE	< 0.02	0.004
METHOXYCHLOR	< 0.5	0.1
TOXAPHENE	< 1.	0.005
2,4-D	< 1.	0.1
2,4,5-TP SILVEX	< 1.	0.01
RADIUM	-	5 pCi/l
GROSS ALPHA	-	15 pCi/l
GROSS BETA	-	4 MREM/yr.

* OSM-2 A down-gradient well located at the waste containment boundary.

< Less than the detection limit of the analytical method.

** Representative data for three quarterly analyses run to date. (July, Oct, Dec 84)

___ Indicates that these are EPA priority pollutants.

The ground water monitoring results from this down-gradient well along with 18 additional ground water monitoring well samples all meet or exceed the Environmental Protection Agency and State of Oregon primary drinking water standards, which indicates that the contents of the ore pond have been fully contained by the asphaltic liner.

(3) Run-on/Run-off water (collected within the pond) test results from 19 Nov 84.

ELEMENT	OSM Sample mg/l	EPA Primary & Secondary Drinking Water Std mg/l
ARSENIC	< 0.025	0.050
BARIUM	0.02	1.0
CADMIUM	0.0019	0.010
CHROMIUM	< 0.01	0.050
FLORIDE	4.93	1.4-2.4
LEAD	< 0.001	0.050
MERCURY	< 0.0005	0.002
NITRATE	0.13	10.0
SELENIUM	< 0.001	0.010
SILVER	0.0016	0.050
IRON	0.08	0.3
MANGANESE	0.004	0.05

The run-on/run-off water collected within the lined storage facility meet or exceed the EPA and ODEQ primary drinking water standards with the exception of fluoride. Although the drinking water standard for fluoride is exceeded, it is not listed as a hazardous constituent of the iron ore mixture by EPA or ODEQ standards supported in section (1) above, and this water is fully treated and reused within the steel making process. Fluoride is not released from the facility into any drinking waters of the State.

(9) (a) Coffey Laboratories Inc.
4914 N.E. 122nd. Ave.
Portland, Oregon 97230
Phone: (503) 254-1794

(9) (b) Sampling and Testing - Personnel Description
Resumes for the pertinent personnel may be found in Appendix A.

(1) All samples were collected by Thomas C. McCue, Environmental Engineering Manager for Gilmore Steel Corp.
B.S. Degree in Science, Oregon State University
Continuing Education includes graduate work and seminars in various environmental areas.
Experience includes seven (7) years as an Environmental Engineer, and six (6) years as an Analytical Chemist.

(2) All samples were prepared by Traci L. Trotman, Spectroscopist for Coffey Laboratories
B.S. Degree in Science, Portland State University
Experience includes five (5) years laboratory experience.

(3) All samples were analyzed by Harland B. Haynie, Director of Research and Development for Coffey Laboratories.
B.A. Degree in Math, Whitman College
B.A. Degree in Physics, Whitman College
Experience includes seven (7) years as a nuclear engineer USN, four (4) years lecturing in physics and biochemistry, and four (4) years laboratory experience.

(4) All sample preparation and analysis was supervised by Susan M. Coffey, President of Coffey Laboratories
B.S. Degree in Microbiology, Oregon State University
Graduate course work in Environmental Chemistry and Biochemistry.
Experience includes over ten (10) years as a laboratory chemist.

(b) (5) Consulting Engineer - Dr. Larry L. Russell
President of Russell Environmental Engineering and Development.
Ph.D - Sanitary Engineering, University of California at Berkeley
M.S., B.S. - Civil Engineering, University of California at Berkeley
Experience includes over 15 years as an expert in Environmental Chemistry and Waste Management.

(c) All sampling was performed between December 10-14, 1984.
All samples collected were submitted to Coffey Laboratories for analysis December 14, 1984.
Testing of samples was completed in stages between January 9, 1985 and March 1, 1985. All analyses will be found in Appendix B.

(d) Generating Facility:
Gilmore Steel Corp.
Oregon Steel Mills Division
14400 N. Rivergate Blvd.
Portland, OR 97203

(e) Process Description.
Recycled scrap iron and lime are charged into a water cooled, refractory lined melting vessel or furnace. The iron and lime are melted by passing electric current through the scrap iron at a rate of 520 kw/ton via three graphite electrodes. The electrodes are consumed in the process at a rate of 11 lbs/ton molten steel producing CO and CO_2 gases. The gas mixture in turn provide the transport media for the metal oxide fume and particulates generated by the melting process.

As the scrap iron melts the lime fluxes with the impurities contained in the scrap and floats them to the top forming a foamy slag. Once the slag building process is complete the slag can be drawn off (slag-off) and the remaining "clean" steel can be chemically and metallurgically adjusted with ferro alloys. When the design chemistries are met, the steel is tapped and poured into slabs awaiting final rolling into finished plate.

Raw Materials Used in the Steel Making Process:

- Recycled Scrap Iron
- Lime
- Ferrochromium
- Copper
- Ferromanganese
- Nickel
- Iron Ore
- Ferrovanadium

By-Product of the Steel Making Process

- Slag
- Condensed Metal Oxides and Lime Dust

All steel by-products have been analyzed and evaluated against standards for listed and characteristic wastes. Only the condensed metal oxides found in the emission control dust failed the extraction procedure toxicity test. All other by-products were found non-hazardous.

Emission Control Dust Formation

During the meltdown process the electric arc from the graphite electrodes vaporizes a small amount of the scrap iron at the contact interface creating vapor phase metal fumes. In addition to the arc interface fumes other vapor phase metal fumes are released as the molten bath builds. The first to form are low melting point metals, such as lead and cadmium, which flash off early in the meltdown phase due to their respectively low partial pressures. The mixture of vapor phase metals are carried out of the furnace with the carbon monoxide (CO) formed by the graphite electrodes.

Combustion air is added to the gas mixture immediately after leaving the furnace to oxidize the CO to CO_2. The gas mixture is then cooled by passing thru water cooled duct sections within the fume collection system. As the gas mixture cools, metal oxides condense out of the gas stream to form submicron particulates. The higher melting point metals, such as iron, condense first, providing a nucleus of condensation for the lower melting point metals. The fine particulate formations tend to be somewhat charged depending on the degree of gas ionization (e.g., free vaporized metal vs. oxidized metal) and will therefore agglomerate into larger particles up to 100 microns as they pass thru the gas stream.

Electron micrographs show agglomerations of small spherical particles in large randomly attached masses similar to a crystal growth. They also show spherical growth of agglomerated particles with an outer layer binding them together much like the peel of an orange. Chemical analysis of these agglomerated particles indicate the outer layer to consist of lower melting point metals such as lead cadmium and zinc. The spherical, two component particle is found early in the meltdown cycle, whereas the randomly agglomerated particles are found towards the end of the melt period. This further demonstrates the early flash off of low melting point metals and ultimate condensation of other higher melting point particulate. For a more indepth explanation of steel emission control dust formation see Appendix D.

(f) Ore Storage Facility Content Description -

(composite sample from 25 core samples)

Parameter	Weight (not intended to total 100%)
ARSENIC	< 0.01
BARIUM	0.00108
CADMIUM	0.00203
CHROMIUM	< 0.01
LEAD	0.074
MERCURY	< 0.009
SELENIUM	< 0.009
SILVER	0.0004
IRON	41.0
MANGANESE	0.121
MAGNESIUM	0.255
VANADIUM	0.0013
CALCIUM	1.12
COPPER	0.0215
ZINC	0.496
ALUMINUM	0.266
SODIUM	0.0177
TIN	< 0.001
NICKEL	0.00167
TITANIUM	0.0135
STRONTIUM	0.00141
SILICA	2.07
MOISTURE	7.61
TOTAL	53.1%

The remaining weight is thought to be oxygen and a small amount of residual material which could not be dissolved. No further production of this material occurs because the material to be declassified is a mixture of emission control dust metal oxides (mostly iron oxide) and iron ore.

(g) BASIS FOR LISTING AS A HAZARDOUS WASTE

SEE APPENDIX E.

(h) SAMPLING METHOD

Description

The sampling method was developed in an effort to obtain statistically valid samples which accurately describe the entire contents of the ore storage area. This objective proved difficult due to the variation in sample density and moisture content. The ore storage area traps rain water within the asphaltic liner which mixes with the iron ore and EAF dust to maintain a 6 to 30% moisture content. The variation in moisture content made some areas so soft that safety equipment was required to prevent sinking. Other areas of the storage area were so hard that core samples required predrilling to loosen compacted layers. Photographs of the sampling procedures may be found in Appendix C.

After attempting three different core sampling methods an Oakfield core sampler was chosen.(Photo P-1) The Oakfield sampler consisted of a hollow sample probe, open on the side, with hardened cutting tip.(Photo P-2) Thirty (30) inch extensions and a tee handle could be attached to the hollow sample probe allowing the probe to be pushed into the ore.

Since a continuous core sample was needed to depths as deep as thirteen (13) feet, a sample casing was needed. The casing consisted of three sections of one inch conduit which could be threaded together.(Photo p-3) The sample casing insured that all core samples obtained from the Oakfield sampler came from precisely the same column of soil extending from the surface to the asphaltic liner.

A sampling grid was set up to accurately locate sample points. The grid consisted of a ten (10) by eleven (11) matrix of 110 sample points accurately positioned with a standard surveyors transit.-(Photo P-4,5) Twenty-five (25) sample points were picked from the sampling grid by a computer based statistically random selection program run on an IBM PC XT computer.(Table T-1 Appendix D) The computer selected points were plotted on the sample grid and full depth core samples were taken from these points.

Procedure

A sampling station was set up at each sample point to minimize sample contamination.(Photo P-6) A clean paper work surface was used to set out all samples and sampling equipment. All equipment was cleaned between sample stations to prevent cross-contamination. After equipment set-up the sample casing was advanced into the sample media using a slide hammer.(Photo P-7,-8) Care was taken not to advance the casing more than one foot before sampling to prevent compacting within the casing. The Oakfield core sampling probe was then pushed down the casing, retrieving the core section.(Photo P-9) The core section was placed into a clean one quart jar and the process was repeated by advancing the casing and resampling until contact with the asphaltic bottom occurred.(Photos P-10-11-12) When a full depth core sample was obtained the sample jar was sealed with a gasketed screw top lid, labeled and placed into a box for shipment to the lab.(Photo P-13). Finally all sample data was recored including sample number, location, and depth of the core.(Photo P-14)

(i) Sampling handling and preparation

All samples were collected in clean, clear glass, 1 quart bottles with screw top lid containing a vinyl seal. Both the lid and bottle were labeled with a sample identification number and recorded on the field data sheet. All filled sample bottles were placed back into the original shipping carton for transport to the laboratory. All samples were taken directly to the laboratory and logged in by the quality control methods specified in the QA/QC manual found in Appendix F.

(1) Scope of Work: LABORATORY INSTRUCTIONS

A series of 25 core samples were obtained from an iron ore pile. Due to the height of the pile the samples take from one to three containers each and are labeled A,B,C respectively. You will find a total of 42 containers which make up the 25 core samples.

Analysis

25	EP toxicity	-	one EP tox on each core sample
1	EP toxicity	-	one EP tox on the composite sample
		-	the composite sample to be weighed up by Coffey Labs to provide mass balanced composite. (See Example provided)
1	EP toxicity	-	EAF dust composite (6% Pb)
28	Quantitative	-	Full Quantitative analysis on all core samples and composite samples.

2	Primary Drinking Water Analysis	- Analyze both water samples for Primary Drinking Water Standards. Emphasis will be on metals.
1	pH & Buffering Capacity	- EAF dust composite report the pH of EAF dust in distilled water and the amount of acid used in the EP tox test.

MASS BALANCE FORMULA for the preparation of the composite sample:

$$\frac{\text{SAMPLE GROSS WT. - TARE WT.}}{\text{TOTAL SAMPLE WT.}} = \text{COMPONENT WT. OF SAMPLE IN COMPOSITE}$$

Reports - Prepare reports separately on the following categories of analysis:

1. EP toxicity analysis of the 25 core samples and the composite sample.

2. EAF dust report including EP tox, Quantitative analysis, pH (H_2O) and buffering capacity.

3. Quantitative analysis report of all 25 core samples and the composite sample.

4. Primary drinking water analysis report of both water samples.

OAR 340-100-022 (1) Continued

FIELD SAMPLE DATA

Sample	Location	Depth	Sample	Location	Depth
1	3	7.0'	16	62	5.5'
2	8A	12.25'	17	66	3.0' *
3	8B	13.25'	18	74	4.25'
4	11	13.0'	19	76	5.25'
5	18	8.0'	20	83A	3.5
6	19	9.0'	21	83B	3.5'
7	29	4.5'	22	87	5.5'
8	30	10.0'	23	98	5.5'
9	36	6.5'	24	99	6.0'
10	38	7.0'	25	101	4.5'
11	47	6.0'			
12	49	9.25'			
13	50	10.25'			
14	51	8.25'			
15	61	7.5'			

* Unable to sample full depth - expected depth 5.5'

(j) DESCRIPTION OF TESTS PERFORMED

The extraction technique follows the EP toxicity test procedures specified in:

> Federal Register/Vol. 45, No. 98/ Monday,May 19, 1980/Rules and Regulations; Appendix II, page 33127.

The digestion method for total metal analysis follows the ASTM microwave digestion procedure.

(k) INSTRUMENTATION

(a) EP toxicity extractions were analyzed on the following instruments:

(1.) Perkin-Elmer Model 5000 Atomic Absorption Spectrophotometer with autosampler, graphite furnace, and hydride attachments.

(2.) Varian AA-575 Atomic Absorption Spectrophotometer with vapor generation attachments was used for Mercury analysis only.

(b) Total metal digestions were analyzed on;

Perkin-Elmer Model 6000 Inductively Coupled Plasma (ICP) with auto sampler, peristaltic pump, and purge attachments.

OAR 340-100-022 Continued

(1) CERTIFICATION

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

SIGNED THIS _____ DAY OF _____ 1985

_____

Thomas C. McCue

Environmental Engineering Manager

Gilmore Steel Corporation

Attachment 1
Agenda Item K
21/86 EQC Meeting

OREGON STEEL MILLS

DIVISION OF GILMORE STEEL CORPORATION
P.O. BOX 2760 • PORTLAND, OREGON 97208
TELEPHONE (503) 286-9651
TWX: 910 464 1549

December 20, 1985

Fred Hansen, Director
Oregon Department of Environmental
Quality
P.O. Box 1760
Portland, OR 97207

RE: **Gilmore Steel Corporation (OSM) - Petition for Variance from Classification as a Solid Waste**

Dear Mr. Hansen:

Gilmore Steel Corporation hereby petitions the Director of Oregon Department of Environmental Quality (and the Oregon Environmental Quality Commission) to grant a variance until December 31, 1986 from classifying certain iron ore material as a solid waste by virtue of being accumulated speculatively without sufficient amounts being recycled or transferred for offsite recycling. Although Gilmore Steel will ship the material as soon as feasible, we cannot now know when the transportation problem will be solved.

Background. The material in question is certain iron ore material (iron ore, ore fines, and emission control dust) in the DRD ore storage facility at our Rivergate Plant. As you know, material has been held at our plant for recycling, either at our plant or to be sold and shipped offsite for use as an ingredient in making a product, and both DEQ and EPA Region 10 have concurred that if so sold and transferred, without being reclaimed or speculatively accumulated, the material is not a solid waste (and hence not a hazardous waste). (See letter of Kenneth D. Feigner, EPA Region 10, to Thomas C. McCue, Gilmore Steel dated July 29, 1985 with copies to DEQ.)

Gilmore Steel Corporation sold the material to a cement manufacturing company in Canada for use as an ingredient in making ferro cement and arranged transportation by barge. It will all be used in the cement, nothing will be reclaimed. Four barges, each of about 12,000 tons capacity were contemplated to load and depart in the month of December 1985. The first barge, carrying about 12,034 tons departed December 14, 1985 but experienced difficulty at sea. We are told by the barge company that the load shifted and caused the barge to list dangerously. Fortunately, however, the barge did arrive safely at Vancouver, B.C. The second barge is at the loading pier, but the barge company has placed a hold on further loading of shipments until it investigates the problem and determines the suitability of its barges for the loads. Gilmore Steel is working with the barge company on the problem and has contacted other barge companies for bids and time schedules. Because of these unforeseen, temporary, and uncontrollable circumstances, Gilmore Steel may not be able to complete the transfer offsite of 75% or more of the material for shipment to the purchaser by December 31, 1985.

(4) Handling to minimize loss. The material is handled carefully to minimize loss. It is all valuable material. The method of transfer is by truck to a bulk loading facility in the Rivergate Industrial area for loading into the barges for carriage to the purchaser's plant site in Canada.

(5) Other relevant factors. As you know, Gilmore Steel Corporation believes none of the material is hazardous waste by virtue of other criteria, and, at most, the emission control dust could be hazardous waste. (The emission control dust is still iron oxide, but with traces of lead, cadmium and chrome. These traces are absent form the other material.) Out of an abundance of caution, however, Gilmore Steel Corporation makes this request for a variance.

Your attention to this matter and the help of your staff is greatly appreciated. In the interest of time, if further information is needed, please call Tom McCue, Environmental Manager, at 286-9651.

Sincerely,

Thomas B. Boklund
President

TBB:dr

cc: Kenneth Feigner
Chief, Hazardous Waste Branch
U.S. EPA, Region 10

UNITED ATES ENVIRONMENTAL [illegible]ECTION [illegible]NCY

Attachment 2
Agenda Item K
1/31/86 EQC Meeting

NOV 20 1985

M/S 533

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Thomas B. Boklund, President
Gilmore Steel Corporation
P.O. Box 2766
Portland, Oregon 97208

HW - 42 W 8T

Dear Mr. Boklund:

This is in response to Gilmore Steel Corporation's (Gilmore) letters of August 29 and September 30, 1985. For your convenience, I have structured this letter to correspond to the format used in your letters. These responses are all based on the assumption that Gilmore will handle the material in the DRD pond in such a manner that it does not meet the definition of a solid waste under §261.2(e)(1), as long as Gilmore did not accumulate speculatively and could document its claim that the materials are not solid wastes or are conditionally exempt from regulations set out in §261.2(f).

A. The Environmental Protection Agency's (EPA) letters dated February 28, 1985, and July 30, 1985: We agree that the information on past practices under 3004(u) of the Resource Conservation and Recovery Act (RCRA) 1984 amendments is not required. Based on EPA's review of Gilmore's responses to these letters on April 2 and September 30, 1985, we have found no evidence that there has been any release of a hazardous waste or hazardous constituent to the environment from the facility.

B. EPA's letter of July 18, 1985: We agree that the Exposure Information Report under the RCRA amendments is not required.

C. EPA's letter of July 29, 1985:

1. <u>DRD Ore Storage facility</u>: We agree that Gilmore does not require interim status, nor a RCRA permit, nor a closure plan, with respect to the DRD Ore Storage facility. Gilmore should also be aware if the K061 dust that is stored in the pond were to escape from the unit (i.e., toxic contaminants were to leach from the waste and contaminate groundwater), this would constitute disposal and meet the definition of abandoned, and thus would be defined as a solid waste. Since the material would also be a hazardous waste, the material leaking from the unit would be subject to the hazardous wastes rules.

[illegible] of the ponded water from the DRD pond into it.

SURNAME	WMB:C.Massimino;cm;11/8/85;4541					
DATE	Hofer	Rice	Feigner		11/8/85	

EPA Form 1320-1 (12-70)

OFFICIAL FILE COPY

[redacted] letter of August 7, 1985: We agree that Gilmore's facility is not a land disposal facility.

The above information is being requested pursuant to Section 3007 of RCRA. Your response should be directed to Catherine Massimino at the letterhead address within 45 days of your receipt of this letter. Failure to respond to a Section 3007 request could subject Gilmore to enforcement action including monetary penalties.

Please direct any further questions on this matter to Catherine Massimino of my staff at (206) 442-4153.

Sincerely,

/s/ Charles E. Findley

Charles E. Findley, Director
Hazardous Waste Division

[redacted]

cc: Michael Gearheard, EPA
Michael Downs, DEQ

bcc: A. Whitson, EPA
C. Massimino, EPA
Janet Gilespie, DEQ

[redacted]

Attachment 3
Agenda Item K
1/31/86, EQC Meeting

December 9, 1985

TO: File

FROM: Dick Bird

SUBJ: Telephone Call To Brian Acton

I talked to Brian Acton of Pacific Basin Coal & Carbon in Canada this afternoon and he passed on to me that LaFarge wants the 4th barge of iron ore material.

This then will empty the DRD storage pond of all iron ore and will raise the total quantity to ship to approximately 47,000 tons.

LaFarge will issue a purchase order change to cover the additional material on the 4th barge when our transportation problems are solved.

The necessity for the 4th barge was caused by the high moisture content in the iron ore.

ORDER

PACIFIC REGION

TO THE VENDOR

OREGON STEEL MILLS

Page 2.

DATE Nov. 29, 1985 NO. 18386 H.

PLEASE SHOW THIS NUMBER ON CORRESPONDENCE, INVOICES, PACKING SLIPS AND BILLS OF LADING

INVOICE IN TRIPLICATE

SHIPPING INSTRUCTIONS

LINE NO.	BILL CODE	QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
1			Price Adjustments		
2			a) Iron Content - if the average Fe content		
3			(dry basis) of the material shipped is		
4			less than 65.0% by weight (dry basis), the		
5			$16.09 US per short ton (dry basis) price		
6			will be lowered in proportion as the per-		
7			centage Fe content is to 65.0%.		
8			eg. Average Fe content is 64.0% (dry basis)		
9			Price is adjusted as follows:		
			$\frac{64.0}{65.0} = .98$		
12			Price (dry basis) = 1609 x .98 = $15.77		
13			This price is now subject to the moisture		

adjustment as per (b).

....../3

PACIFIC RIM ...

TO THE VENDOR

OREGON STEEL MILLS

DATE Nov. 29, 1985. NO. 18386 H.

PLEASE SHOW THIS NUMBER ON CORRESPONDENCE INVOICES ING SLIPS AND BILLS OF LADING
INVOICE IN TRIPLIC

SHIPPING INSTRUCTIONS

UNIT NO.	BILL CODE	QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
1			Weight Determination: The weight of material		
2			purchased will be determined in the loaded barges		
3			at Portland Oregon by a licensed marine surveyor and		
4			will constitute the basis of OSM invoices to C.C.L.		
5			If disputed, the parties will discuss and reach a		
6			mutually acceptable conclusion.		
7					
8			Payment Terms:		
9			a) Up Front Payment: C.C.L. agrees to pay $30,000 US		
10			on completion of unloading first barge.		
			b) Deferred Payments: The balance of the first ship-		
12			ment as well as all subsequent barge shipments		
13			will be paid for by C.C.L. to OSM based on C.C.L.'s		

actual monthly usage of the iron ore material. The price of the material will be calculated upon arrival of the three barges and after adjustments for iron content and moisture.

...../5

TO THE VENDOR

OREGON STEEL MILLS

DATE Nov. 29, 1985. NO. 18386 H.

PLEASE SHOW THIS NUMBER ON
CORRESPONDENCE, INVOICES
ING SLIPS AND BILLS OF LADING
INVOICE IN TRIPLI

SHIPPING INSTRUCTIONS

LINE NO.	BILL LENGTH	QUANTITY	DESCRIPTION	UNIT PRICE	AMO.
1			c) C.C.L. anticipates but does not guarantee using		
2			4,000 short tons per year of the OSM iron ore material		
3			or an average of 333 tons per month.		
4					
5					
6					
7					
8			Effect of Permanent Closure of Richmond Plant:		
9			The parties have no expectation at this time of		
10			permanent closure of the Richmond plant, but		
			recognize that use of the materials by C.C.L. in		
12			making cement will stretch out over a number of		
13			years. In the event that C.C.L.'s Richmond plant		

is permanently shut down before all the material has been used, C.C.L. will have no further obligation for any additional payments for the material remaining unused and title to this remaining unused material shall revert to OSM. OSM will have a reasonable time, which shall be not less than two years, to resell the material and transfer if off C.C.L.'s plant site or make other arrangements. OSM will not be required to pay to C.C.L. any rent, storage charge, insurance, or any other fees, costs, or rebates of any kind in connection with the reversion of title of the material and its presence on C.C.L's sites during the reasonable period and OSM will have the right itself or through its agents to enter C.C.L.'s property as appropriate to carry out the sales or other arrangements for the material. If title to any of the material shall revert to OSM as a result of the permanent closure of C.C.L.'s Richmond plant,

...../7

Attachment 4
Agenda Item K
1/31/86 EQC Meeting

HOLBROOK - Joseph (Ted) Theodore, Dec 29 in Milwaukie, husband of Mrs. Myrtle Holbrook, father of Mrs. Richard (Lythe) Keves, Portland; brother of Elmer Holbrook, Portland, D. John Sumner Holbrook, Seattle, WA; grandfather of Eric and Kirk Keves, Portland. Funeral services Thursday, Jan 2, 10 am, St Paul United Methodist Church, Milwaukie. Final interment following, Lincoln Memorial Park, Portland. Those wishing may contribute to St Paul United Methodist Church or Shriners Crippled Childrens Hospital, Portland Unit. Visitation 12 noon to 4 pm Wed., Jan 1. STEHN'S Milwaukie Funeral Home 7906 Harrison 654-7717

JACOBSON - Frieda; beloved sister of Rose E. Groce, Portland and Caroline Kerbersky, Los Angeles; 18 grandchildren and nieces and nephews also survive. Services Friday, Jan 3, [illegible] pm at ROSS HOLLYWOOD CHAPEL, NE 48th & Sandy. Friends invited. Private vault entombment Riverview Abbey mausoleum. The casket will be open Thursday 12 noon to 8 pm at the chapel. In lieu of flowers, contributions to Shriners Crippled Childrens Hospital. Member of Mt Hood Chapter No 144 OES, Hydie Temple No 4, Daughters of the Nile; Metaphysical Study group and Unity Church.

JANSON - Kurt H. Memorial service 3 pm Thursday, Jan 2, Lutheran Church of the Resurrection, 1700 NE 132nd. Friends invited. Private committal. In lieu of flowers, family suggests contributions to Oregon Kidney Assn, PO Box 222, Portland 97207 or Lutheran Church of Resurrection memorial fund. Arrangements by ROSS HOLLYWOOD CHAPEL.

JOHNSON - Luella Viola. Services 3 pm Friday at Immanuel Temple Church, [illegible] N Sumner. Visiting hrs 4-6 pm Wed., 1-7 pm Thurs at VANN & VANN, 3211 N Williams. Interment Rose City cemetery.

KLUDT - Bruce C., husband of Radovic; father of Carey; son of Elmer and Helen Kludt; brother of Roberta Lane, John, Elizabeth, Cynthia, Connie and Lance Kludt; 2 nieces and 2 nephews; son-in-law of LaVerne Phelan. Mass of Christian Burial 10 am Thursday at Holy Cross Catholic Church, 5227 N Bowdoin. Concluding services Skyline Memorial Gardens. Directed by CALDWELL'S COLONIAL MORTUARY

LUDWICK - Lester M., husband of Mary Jean; father of Beverly Jean Bieser, John Ludwick, Sr Barbara Crittenden and Sr Rosemary Ludwick; brother of Nora Taylor and Morris Ludwick; 8 grandchildren, 3 great grandchildren. Service 10 am Thursday at HOLMAN'S FUNERAL SERVICE, SE Hawthorne at 27th. Concluding service Gethsemani cemetery. For those who wish, contributions may be made to Hospice Fund c/o Providence Medical Foundation, 4805 NE Glisan 97213

Want Ads Call [illegible]

[illegible] & VANN 3211 N Williams [illegible] ment Rose City cemetery

PETERSON - David Conrad, SW Cheltenham St, Portland, Dec 30, beloved husband of Irene; brother of Melvin, Peter Peterson. At the request of the family there will be no services held. CARROLL FUNERAL HOME, Gresham

PINKSTON - Viola Virgie, Dec 29 in Portland; mother of Melvin Pinkston, Portland, Mrs. Charles (Louella) Deig, Seaside, OR; grandmother of 8 grandchildren, 12 great grandchildren. Funeral services Thursday, Jan 2, 1 pm. FOSTER RD FUNERAL HOME 6[illegible] SE Foster rd 777-[illegible] Private interment following Lincoln Memorial Park, Portland. Those who wish may visit Wed., Jan 1, 12 noon-8 pm

POST - Yolanda C. Mass of Christian Burial 9:30 am Thursday, Jan 2, St John Catholic Church, [illegible] SE 25th, Milwaukie. Interment Gethsemani cemetery. Directed by PEAKE MEMORIAL CHAPEL

QUIGLEY - Virginia G., sister of Juanita E. Brossard and Marie J. Lowe. At request of deceased no funeral service. Visitation 9 am-5 pm Thurs., Jan 2 at WILHELM FUNERAL HOME, 6637 SE Milwaukie. Private interment River View cemetery. Friends who wish may contribute to American Cancer Society.

RICKERT - Lloyd Robert, beloved husband of Natalie Rickert; father of Lorraine Sinclair, Dale Robert Rickert, Wayne Robert Rickert, Rapon Robert Rickert and Bruce Robert Rickert; 2 grandchildren. Funeral services 1 pm Friday, Jan 3, Chapel of CARROLL FUNERAL HOME, Gresham.

RIGGLE SR - Raymond E., late of Palo Alto, CA, formerly of Oregon City; father of [illegible], Gladstone; Raymond E. Jr., Palo Alto; Mike, Salt Lake City; brother of James, Roanoke, VA; Norman, Trona, CA; 4 grandchildren. Services Saturday, Jan 4, 11 am at Mt View cemetery, Oregon City. Family suggests contributions to Lutheran Family Services of Oregon or Mr Riggle's name. HOLMAN-HANKINS-BOWKER & WALD, Oregon City, directors.

RITCHIE - Gordon E., beloved husband of Emal; father of Ronald R. Ritchie, Shirley Jean Richards & William A. Ritchie; 10 grandchildren. Funeral services 11 am Thursday, Jan 2nd, THE GATEWAY LITTLE CHAPEL OF THE CHIMES, NE Halsey at 110th. Private interment Gateway Little Chapel of the Chimes Memorial Gardens.

SCHMIDT - Casper, beloved husband of Lydia A. Schmidt, Beaverton; brother of Louis Schmidt, Canada. Friends invited to funeral service 3 pm Wednesday, Jan 1, Pilgrim Lutheran Church, Beaverton. Interment 10 am Thursday, Crescent Grove. PEGG, PAXSON & SPRINGER, Beaverton, Directors.

SCHWAB - Susan M. Funeral services 10 am Thursday at BATEMAN'S, Gresham. Committal Willamette National. Contributions to Make A Wish or Emanuel Hospital.

SIMS - Dessie P. Services 1 pm Thursday, Jan 2, Chapel of HOLMAN-HANKINS-BOWKER & WALD, Oregon City. Interment at [illegible] cemetery. Family [illegible]

[illegible] white M[illegible] Himalayan Siamese C[illegible] Lost nr Sumner [illegible] Church 12 25 85 Reward 777-[illegible]

LOST Large black & white male cat near Companion Pet Store SE [illegible] & [illegible] 659-3278

LOST Large orange male tabby, red collar & bell, near Jantzen Beach Mall. Reward. Call collect. 1-756-583-[illegible]

LOST Necklace Ring Set, [illegible] Lake Grove & Tualatin 12/27. Reward 1-[illegible] collect

15 Meeting Notices

COLUMBIA LODGE [illegible] 1119 SW Park. Stated Communication 7:30 pm Thurs., Jan 2nd

KENTON LODGE 145 AF&AM 8139 N Denver. Thurs. [illegible] am. Trustees & Officers meeting

20 Public Notices

DATE PREPARED
December 30, 1985
Comments Due January 28, 1986

What is Proposed: Gilmore (Oregon) Steel Mill has requested the Environmental Quality Commission for a variance from classification as solid waste certain iron ore material. The iron ore material has been accumulated on-site without a sufficient amount being recycled during calendar year 1985.

Who is Affected: Residents and business in or near the Rivergate district of Portland.

What are These Highlights: Gilmore (Oregon) Steel Mill's variance request, if granted, would allow the iron ore material to continue to be used for recycling and reclamation. Under applicable state and federal regulations (40 CFR 260.31) these factors (summarized here) should be considered when making the variance decision:

1. MANNER IN WHICH THE MATERIAL IS TO BE RECYCLED. The material is to be used in manufacturing cement.
2. REASON THE APPLICANT HAS NOT USED SUFFICIENT QUANTITIES DURING THE PREVIOUS YEAR. Slowing of [illegible]
3. QUANTITY OF MATERIAL ACCUMULATED AND QUANTITY OF MATERIAL TO BE GENERATED. [illegible] tons remain at the site with an additional 12,000 tons at the [illegible] facility. All is expected to be recycled, and no additional material will be stored on-site.
4. HANDLING TO MINIMIZE LOSS. Material has been carefully handled.
5. OTHER RELEVANT FACTORS have been considered.

What is next: The Department of Environmental Quality has made a tentative determination that the variance request should be granted. The Environmental Quality Commission may agree or disagree. Action will likely come at the EQC January 31, 1986 meeting.

Where to Get Additional Information: For a copy of the variance, the staff report or meeting agenda, contact the DEQ Northwest Region Office, 229-[illegible]. Written comments are due to the DEQ, PO Box 1760, Portland, Oregon 97207, by January 28, 1986.

More [illegible]

Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207

522 SOUTHWEST 5th AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item K , January 31, 1986, EQC Meeting

Request for Variance from Gilmore (Oregon) Steel from Classification as Solid Waste Certain Iron Ore Material

Background

Gilmore Steel operates a steel rolling mill in the Rivergate district of north Portland. The facility is also known as Oregon Steel.

The company combines scrap iron and various alloys to produce steel. The mill was built in 1970. The company had used an impoundment to store iron oxide ore. The iron ore pond is about 310 feet by 390 feet and 19 feet deep, and is located south of the main mill, adjacent to the Willamette River. To control air pollution, the company uses a baghouse.

In May of 1980, the company started using recycled scrap iron to replace iron ore in its steel making process. This caused some contaminants from scrap iron (lead, cadmium and chromium) to be generated in the steel making process. The contaminants were collected in the baghouse. The baghouse dust was deposited in the iron ore storage pond from May of 1980 until March, 1981.

Under current state and federal Resource Conservation & Recovery Act (RCRA) hazardous waste regulations, baghouse dust from the primary production of steel in electric furnaces is a listed waste (#K061, Emission Control Dust/Sludge).

Disagreements between EPA, DEQ and Gilmore Steel over the proper regulatory handling of the material in the iron ore pond delayed disposition of the material for several years.

A regulatory light-through-the-tunnel appeared with EPA's revision of the hazardous waste rules to exclude legitimate recycling or reuse from hazardous waste regulations. EPA promulgated these rules January 4, 1985; they were adopted by reference by the Environmental Quality Commission on

The first barge departed Portland December 14, 1985 carrying 12,034 tons of iron ore. The load started to shift while at sea, causing the barge to list. The barge was safely secured and off-loaded in Vancouver, British Columbia. However, the barge company placed a hold on further loading of shipments until it investigates the problem and a determination is made about the suitability of its barges for further shipments. Additional barge companies were unavailable for the remaining 3 loads. Thus, Gilmore was unable to meet the December 31, 1985 deadline for recycling at least 75% of the material, and it technically is a hazardous waste. If it were to remain in place, it would be subject to full hazardous waste regulations and require a treatment, storage or disposal permit.

On December 24, 1985, Gilmore Steel filed a petition for variance from classification as solid waste for its iron ore.

Analysis

The Environmental Quality Commission must base its decision on the following standards and criteria (40 CFR 260.31):

(1) The manner in which the material is expected to be recycled, when the material is expected to be recycled, and whether this expected disposition is likely to occur (for example, because of past practice, market factors, the nature of the material, or contractual arrangements for recycling):

Gilmore has sold the material to Canada Cement Lafarge, Ltd., a Canadian ferro-cement manufacturer (see Attachment 3). The first load of material has been accepted by Canada Cement Lafarge, Ltd. for reuse. Gilmore has indicated that it intends to transport the iron ore to Canada Cement Lafarge, Ltd. as soon as possible. Resolution of the shipping difficulties with the barge company or retaining a different barging company have brought about delays. The staff believes that the material will be recycled as ferro-cement.

(2) The reason that the applicant has accumulated the material for one or more years without recycling 75 percent of the volume accumulated at the beginning of the year.

EPA indicated its agreement that the material was covered by the recycling reuse rules in a November 20, 1985 letter. The company would have recycled at least 75% of the material by the end of the calendar year as required had unforeseen shipping difficulties not arisen.

(3) The quantity of material already accumulated and the quantity expected to be generated and accumulated before the material is recycled.

The company estimates that 47,000 tons (wet weight) was originally stored in the pond. The first shipment included 12,034 tons. The second shipment of about 12,000 tons has been transfered from the pond to the loading pier. This leaves 23,000 tons in the pond and 12,000 tons at an adjacent loading pier.

III. Deny the Variance

If the Commission denies the variance, effective January 1, 1986, the material is subject to full regulation as a surface impoundment. The company would be required to resume its activities for securing a Part B permit for Treatment, Storage, or Disposal Facilities. Additional requirements would include: Financial assurance, closure and post closure care, and continuation of the groundwater monitoring program.

IV. Authority to Act

The EQC has the authority to act under its recycling/reuse rules adopted July 19, 1985. Legal authority for action is included in Oregon Revised Statutes 459.440 "Rules & Orders". Telephone conversations with EPA--Region X have indicated that EPA believes the ability to act on the petition is with the EQC and generally agrees with the Department's approach. After consultation with a majority of the Commission by phone, a public notice was printed in the January 1, 1986 Oregonian (See Attachment 4).

Summary

1. Gilmore Steel Mill (also known as Oregon Steel Mill) operates a steel rolling mill in the Rivergate district of Portland.

2. An iron oxide ore storage pond adjacent to the mill once received baghouse dust.

3. The remaining iron oxide ore can be legitimately recycled or reused, removing it from the definition of a solid waste under the provision of 40 CFR 261.

4. Gilmore has a contract to sell the material to a Canadian ferro-cement company.

5. Shipping difficulties caused Gilmore to not recycle or reuse 75% of the material in 1985. The material therefore becomes fully regulated as a hazardous waste.

6. Variances can be granted by the Environmental Quality Commission for material which has over-accumulated.

7. The Department has reviewed the variance petition submitted by Gilmore and believes that the material will be legitimately recycled or reused, and that no environmental damage will occur from the additional time the material is stored at Gilmore.

OREGON STEEL MILLS

PO Box 2760
Portland, Oregon 97208
Phone (503) 286-9651

May 7, 1985

Kenneth D. Feigner, Chief
Waste Management Branch (M/S 533)
U.S. ENVIRONMENTAL PROTECTION AGENCY
1200 Sixth Avenue
Seattle, Washington 98101

Re: Gilmore Steel Corporation
Groundwater Data Submittal

Dear Mr. Feigner:

Enclosed you will find the fourth submittal of Groundwater Analysis as specified in the Partial Consent Agreement and Final Order filed with EPA February 11, 1985. The data represents the fourth consecutive quarter analysis for Well #9. Also enclosed are the Groundwater Elevation Data for all fifteen (15) well points. If you have any questions regarding the data, you may contact me at (503)286-9651.

Please note the contamination in the transfer blank, upon review of the sampling procedures it was found that the sampler had a tear in one (1) of the rubber gloves. However, no contamination was found in the ground water sample.

Sincerely,

Thomas C. McCue
Environmental Manager

TCM/jp
Enclosure
cc: R.C. Bird
M.B. Durning
J.A. Gillaspie
File

OREGON STEEL MILLS
Div. of Gilmore Steel Corporation
Hydrologic Measurements

Well #	Measuring Point Elevation	Depth To Water	Ground Water Elevation
GS-1	34.82	11.90	22.92
GS-2	32.89	10.19	22.70
GS-3	34.87	11.57	23.30
GS-4	35.18	12.46	22.72
GS-5	34.24	23.06	11.18
GS-6	34.58	7.99	26.59
GS-7	40.29	17.93	22.36
GS-8	40.09	17.38	22.71
GS-9	40.00	17.39	22.61
GS-10	40.18	17.49	22.69
GS-11	34.02	11.39	22.63
GH-1	35.23	11.86	22.37
GH-2	34.80	11.85	22.95
GH-3	31.90	DRY	---
GH-4	35.23	12.51	22.72

Laucks
Testing Laboratories, Inc.
940 South Harney St., Seattle, Washington 98108 (206)767-5060

Certificate

Chemistry, Microbiology, and Technical Services

CLIENT: Oregon Steel Mills
P.O. Box 2760
Portland, OR 97208
ATTN: Tom McCue

LABORATORY NO. 95019

DATE: Feb. 19, 1986

P.O. #51545

REPORT ON: WATER

SAMPLE IDENTIFICATION: Submitted 1/30/86 and identified as shown below:

TESTS PERFORMED AND RESULTS:
1) OSM GS-9 JP/PC 1/28/86 1200
2) OSM TB JP/PC 1/29/86 0800

Note: Where samples were submitted and analyzed in quadruplicate, these replicates are indicated by the designations a, b, c and d.

	1a	1b	1c	1d
pH, glass electrode @ 25 C	7.5	7.5	7.5	7.5
Specific Conductivity, micromhos/cm @ 25 C	250.	230.	230.	230.
Total Organic Carbon, parts per million (mg/L)	24.	35.	24.	25.
Total Organic Halogens as Cl, parts per million (mg/L)	L/0.02	L/0.02	L/0.02	L/0.02

This report is submitted for the exclusive use of the person, partnership, or corporation to whom it is addressed. Subsequent use of the name of this company or any member of its staff in connection with the advertising or sale of any product or process will be granted only on contract. This company accepts no responsibility except for the due performance of inspection and/or analyses in good faith and according to the rules of the trade and of science.

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940 South Harney St. Seattle Washington 98108 (206)767-5060

Certificate

Chemistry Microbiology and Technical Services

Oregon Steel Mills

LABORATORY NO. 95019

	2a	2b	2c	2d
pH, glass electrode @ 25 C	6.2	6.2	6.2	6.1
Specific Conductivity, micromhos/cm @ 25 C	L/5.	L/5.	L/5.	L/5.
Total Organic Carbon, parts per million (mg/L)	9.8	23.	5.6	110.
Total Organic Halogens as Cl, parts per million (mg/L)	L/0.02	L/0.02	L/0.02	L/0.02

	Method Blank a	Method Blank b	Method Blank c	Method Blank d
Total Organic Carbon, parts per million (mg/L)	L/0.1	---	L/0.1	---
Total Organic Halogens as Cl, parts per million (mg/L)	L/0.02	L/0.02	L/0.02	L/0.02

	1	2
Turbidity, Nephelometer units	2.0	0.5
Color, units	60.0	L/5.

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Lauchs
Testing Laboratories, Inc.
940 South Harney St. Seattle, Washington 98108 (206)767-5060

Certificate

Chemistry, Microbiology and Technical Services

Oregon Steel Mills

LABORATORY NO. 95019

parts per million (mg/L)

	1	2	Method Blank
Total Phenol	0.070	L/0.005	L/0.005
Total Kjeldahl Nitrogen	1.1	L/0.5	L/0.5
Alkalinity as CaCO3	86.	L/1.	L/1.
Arsenic	0.048	L/0.005	L/0.005
Barium	L/0.02	L/0.02	L/0.02
Cadmium	L/0.002	L/0.002	L/0.002
Chromium	L/0.005	L/0.005	L/0.005
Iron	1.8	0.02	0.03
Lead	L/0.01	L/0.01	L/0.01
Manganese	0.42	L/0.002	L/0.002
Mercury	L/0.001	L/0.001	L/0.001
Selenium	L/0.005	L/0.005	L/0.005
Silver	L/0.002	L/0.002	L/0.002
Fluoride	6.5	L/0.1	L/0.1
Nitrate as N	L/0.05	L/0.05	L/0.05
Chloride	8.	L/1.	L/1.
Total Hardness as CaCO3	37.	5.	L/1.
Sulfate as SO4	7.	L/1.	L/1.
Sodium	36.	L/1.	L/1.

parts per billion (ug/L)

	1	2
Endrin	L/0.05	L/0.05
Lindane	L/0.05	L/0.05
Methoxychlor	L/0.1	L/0.1
Toxaphene	L/5.0	L/5.0
2,4-D	L/0.8	L/0.8
2,4,5-TP	L/0.4	L/0.4

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Testing Laboratories, Inc.
940 South Harney St. Seattle Washington 98108 (206)767-5060

Certificate

Chemistry Microbiology and Technical Services

Oregon Steel Mills

LABORATORY NO. 95019

Key

L/ indicates "less than"

Respectfully submitted,

Laucks Testing Laboratories, Inc.

J.M. Owens

JMO:br

This report is submitted for the exclusive use of the person, partnership, or corporation to whom it is addressed. Subsequent use of the name of this company or any member of its staff in connection with the advertising or sale of any product or process will be granted only on contract. This company accepts no responsibility except for the due performance of inspection and/or analyses in good faith and according to the rules of the trade and of science.

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Testing Laboratories, Inc.
940 South Harney St. Seattle Washington 98108 (206)767-5060

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Chemistry Microbiology and Technical Services

Oregon Steel Mills

LABORATORY NO. 95019

APPENDIX

Surrogate Recovery Quality Control Report

Listed below are surrogate (chemically similar) compounds utilized in the analysis of volatile and organic compounds. The surrogates are added to every sample prior extraction and analysis to monitor for matrix effects, purging efficiency, and sample processing errors. The control limits represent the 95% confidence interval established in our laboratory through repetitive analysis of these sample types.

parts per billion (ug/L)

Sample No.	Surrogate Compound	Spike Level	Spike Found	% Recovery	Control Limit
Pesticides					
Method Blank	Isodrin	0.500	0.251	50.2	43-118
1	Isodrin	0.510	0.218	42.7	43-118
2	Isodrin	0.515	0.252	48.9	43-118
Herbicides					
Method Blank	2,4,5-T	0.667	0.381	57.1	28-128
1	2,4,5-T	0.667	0.479	71.8	28-128
2	2,4,5-T	0.667	0.399	59.8	28-128

This report is submitted for the exclusive use of the person, partnership, or corporation to whom it is addressed. Subsequent use of the name of this company or any member of its staff in connection with the advertising or sale of any product or process will be granted only on contract. This company accepts no responsibility except for the due performance of inspection and/or analyses in good faith and according to the rules of the trade and of science.

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 SIXTH AVENUE
SEATTLE, WASHINGTON 98101

NOV 20 1985

DEC 3 1985

REPLY TO ATTN OF: M/S 533

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Thomas B. Boklund, President
Gilmore Steel Corporation
P.O. Box 2760
Portland, Oregon 97208

Dear Mr. Boklund:

This is in response to Gilmore Steel Corporation's (Gilmore) letters of August 29 and September 30, 1985. For your convenience, I have structured this letter to correspond to the format used in your letters. These responses are all based on the assumption that Gilmore will handle the material in the DRD pond in such a manner that it does not meet the definition of a solid waste under §261.2(e)(i), as long as Gilmore did not accumulate speculatively and could document its claim that the materials are not solid wastes or are conditionally exempt from regulations set out in §261.2(f).

A. The Environmental Protection Agency's (EPA) letters dated February 28, 1985, and July 30, 1985: We agree that the information on past practices under 3004(u) of the Resource Conservation and Recovery Act (RCRA) 1984 amendments is not required. Based on EPA's review of Gilmore's responses to these letters on April 2 and September 30, 1985, we have found no evidence that there has been any release of a hazardous waste or hazardous constituent to the environment from the facility.

B. EPA's letter of July 18, 1985: We agree that the Exposure Information Report under the RCRA amendments is not required.

C. EPA's letter of July 29, 1985:

1. DRD Ore Storage facility: We agree that Gilmore does not require interim status, nor a RCRA permit, nor a closure plan, with respect to the DRD Ore Storage facility. Gilmore should also be aware if the K061 dust that is stored in the pond were to escape from the unit (i.e., toxic contaminants were to leach from the waste and contaminate groundwater), this would constitute disposal and meet the definition of abandoned, and thus would be defined as a solid waste. Since the material would also be a hazardous waste, the material leaking from the unit would be subject to the hazardous wastes rules.

2. Cooling Pond: We agree that the cooling pond does not require a RCRA permit as a hazardous waste management unit due to the placement of the ponded water from the DRD pond into it.

3. Baghouse Dust Loading Facility: Based on the documentation provided on production and offsite shipment of the electric arc furnace (EAF) emission control dust, it does not appear that the EAF dust was accumulated in the railcars over ninety days prior to shipment and consequently would not require a RCRA permit.

4. Waste Solvent Container Area: Based on the analytical data and certifications provided and subject to EPA's evaluation of the information identified in items i-v below, it appears that the waste solvent storage area was adequately closed and would not require a RCRA permit. Gilmore is requested to submit the information identified in items i-v below, to enable EPA to perform this evaluation.

i. Drawing depicting the grid which was set up, the location of the sample points and the location of the soil which was removed.

ii. Methodology utilized to choose the number, quantity, and location of samples to assure that they were representative.

iii. Procedures utilized to obtain samples and quality assurance/quality control procedures followed for sampling.

iv. Was there evidence of spills and were these areas sampled?

v. Milestones at which the Independent Professional Engineer inspected the facility to support his certification.

Your request that the RCRA Part B application deadline be extended to the end of the public comment period for the closure plan of the Waste Solvent Container area, is granted.

You should be aware that any solidification of hazardous waste would be considered treatment and require a RCRA permit. Under §260.10, treatment is defined as "any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste, or so to recover energy or material resources from the waste, or so as to render such waste non-hazardous, or less hazardous; safer to transport, store, or dispose of; amenable for storage, or reduced in volume."

D. EPA's letter of August 7, 1985: We agree that Gilmore's facility is not a land disposal facility.

The above information is being requested pursuant to Section 3007 of RCRA. Your response should be directed to Catherine Massimino at the letterhead address within 45 days of your receipt of this letter. Failure to respond to a Section 3007 request could subject Gilmore to enforcement action including monetary penalties.

Please direct any further questions on this matter to Catherine Massimino of my staff at (206) 442-4153.

Sincerely,

Charles E. Findley, Director
Hazardous Waste Division

cc: Michael Gearheard, EPA
Michael Downs, DEQ

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 SIXTH AVENUE
SEATTLE, WASHINGTON 98101

JUL 29 1985

RECEIVED
AUG 1985

REPLY TO ATTN OF: M/S 533

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Thomas C. McCue
Environmental Manager
Gilmore Steel Corporation
P.O. Box 2760
Portland, Oregon 97208

Dear Mr. McCue:

This letter is in follow-up to the meeting held on June 4, 1985, at U.S. Environmental Protection Agency (EPA) Region 10's Seattle, Washington office. Representatives of EPA, Gilmore Steel Corporation (Gilmore) and Oregon Department of Environmental Quality (DEQ) were in attendance at the meeting. The major issue of discussion at the meeting was the impact of the redefinition of solid waste promulgated by EPA on January 4, 1985, on the past and present hazardous waste activities at Gilmore's Portland, Oregon facility. At the close of the meeting, EPA Region 10 committed to consult with EPA Headquarters and prepare a response to the following questions which were raised:

1. If Gilmore removed the contents (iron ore and K061 baghouse dust) from its Direct Reduction Division (DRD) pond and sent it to another firm that would use it to make steel, would the contents of the DRD pond not be considered a solid waste based on §261.2(e), "...Materials that are not solid waste when recycled. (1) Materials are not solid wastes when they can be shown to be recycled by being: (i) Used or reused as ingredients in an industrial process to make a product, provided the materials are being reclaimed..."

2. If Gilmore removed the contents from its DRD pond and fed it back into their own furnace for making steel would the contents of the DRD pond not be considered a solid waste based on §261.2(e)(1)(i) or §261.2(e)(1)(iii), "...Returned to the original process from which they are generated, without first being reclaimed. The material must be returned as a substitute for raw material feedstock, and the process must use raw materials as principal feedstocks."

3. If Gilmore fed the K061 baghouse dust it is currently generating back into its furnace to make steel, would it qualify as not a solid waste based on §261.2(e)(1)(i) or §261.2(e)(1)(iii).

4. If Gilmore sent the K061 baghouse dust it is currently generating offsite to a firm that would use it to make steel would it qualify as not a solid waste based on §261.2(e)(1)(i).

5. If Gilmore briquetted the baghouse dust it is currently producing or the contents of the DRD pond, would it effect the materials qualification potential as not a solid waste based on §261.2(e)(1)(i) or §261.2(e)(1)(iii).

6. At what point would a material be able to qualify as not a solid waste under §261.2(e)(1), from the point of generation or at the point of recycling.

7. Could Oregon under its current status of Phase I authorization of the RCRA hazardous waste regulatory program promulgate the redefinition of solid waste and have it be effective or would it require an EPA approval as a modification to their Phase I authorization, or would it require Oregon to have received Final authorization.

The responses to these questions can be found below numbered as per above questions:

1. Yes, the contents of DRD pond would qualify as not a solid waste under those circumstances based on §261.2(e)(1)(i), as long as the contents of the pond is not "accumulated speculatively." As specified under §261.1(c)(8):

> ...material is not 'accumulated speculatively' if the person accumulating it can show that the material is potentially recyclable and has a feasible means of being recycled; and that--during the calendar year (commencing on January 1)--the amount of material that is recycled or transfered to a different site for recycling, equals at least 75 percent by weight or volume of the amount of that material accumulated at the beginning of the period.

The first time period which would be looked at for this calculation would be from January 1, 1985, to January 1, 1986.

2. & 3. The contents of the DRD pond and the K061 baghouse dust would only qualify as not a solid waste under those circumstances based on §261.(e)(1)(i) and only as long as the material is not "accumulated speculatively." §261.2(e)(1)(ii) is not applicable because the prinicipal feedstocks used by Gilmore for producing steel are not virgin raw materials.

4. Yes the K061 baghouse dust would qualify as not a solid waste under those circumstances based on §261.2(e)(1)(i) as long as the material is not "accumulated speculatively."

5. Briquetting the K061 baghouse dust or the contents of the DRD pond would not effect that materials qualification potential as not a solid waste based on §261.2(e)(1)(i) or §261.2(e)(1)(iii) because it is not a form of reclamation.

6. Materials would be able to qualify as not a solid waste under §261.2(e)(1) from the point of generation on.

7. If Oregon adopts the redefinition of solid waste as part of their Phase I authorized RCRA hazardous waste regulatory program, no pre-EPA approval would be necessary for it to be effective in Oregon. It should also be clearly understood that unless Oregon adopts the redefinition of solid waste it will not go into effect in Oregon.

If Gilmore did handle the material in the DRD pond or the K061 baghouse dust in a manner which would qualify it as not a solid waste under §261.2(e)(1)(i), Gilmore must also be prepared to comply with §261.2(f) "...Documentation of claims that materials are not solid wastes or are conditionally exempt from regulation..."

Gilmore should not construe the qualification of the contents of the DRD pond as not a solid waste as relieving Gilmore of its responsibilities to submit a complete Part B application to EPA by September 4, 1985, as specified in EPA's April 17, 1985, dated letter. Under a closure scenario, this would require the submittal of a closure plan, post-closure requirements (if applicable) and financial assurances as specified under 40 CFR Parts 264 and 270.

Please direct any further questions on this matter to Catherine Massimino of my staff at (206) 442-4153.

Sincerely,

Kenneth D. Feigner, Chief
Waste Management Branch

cc: Michael Gearheard, EPA
Rich Reiter, DEQ
Michael Downs, DEQ

OREGON STEEL MILLS

P.O. Box 2760
Portland, Oregon 97208
Phone (503) 286-9651

July 23, 1986

Kenneth D. Feigner, Chief
Waste Management Branch (M/S 533)
U.S. ENVIRONMENTAL PROTECTION AGENCY
1200 Sixth Avenue
Seattle, Washington 98101

Re: Gilmore Steel Corporation
Groundwater Data Submittal

Dear Mr. Feigner:

Enclosed you will find the fifth submittal of Groundwater Analysis as specified in the Partial Consent Agreement and Final Order filed with EPA February 11, 1985. This submittal, as all previous submittals shows no groundwater contamination. Also enclosed are the Groundwater Elevation Data for thirteen (13) of the fifteen (15) well points. Elevation point GH-3 has been removed due to excavation of iron ore material from the storage facility. Elevation point GS-7 was not accessible due to a mechanical problem with the well cap. If you have any questions regarding the data, you may contact me at (503)286-9651.

Sincerely,

Thomas C. McCue

Thomas C. McCue
Environmental Manager

TCM/jp
Enclosure
cc: R.C. Bird
M.B. Durning
J.A. Gillaspie
File

OREGON STEEL MILLS

P.O Box 2760
Portland, Oregon 97208
Phone (503) 286-9651

July 30, 1986

Janet A. Gillaspie
Manager, Northwest Region
Department of Environmental Quality
P.O. Box 1760
Portland, OR 97207

RE: Documentation of Iron Ore Removal for Recycling or Reuse

Dear Ms. Gillaspie:

During the month of July, the fifth, sixth and seventh barges containing iron ore were shipped to Canada Cement LaFarge, LTD. for use as an ingredient in the manufacture of cement. The total amount of iron ore shipped to date is 56,717.55 short tons and was documented by licensed marine surveyor as follows:

Barge #	Date Loading Complete	Amount Shipped
1	12-7-85	12,034.3 ST
2	3-28-86	11,276.5
3	6-2-86	7,102.3
4	6-18-86	2,317.1
5	7-1-86	7,815.6
6	7-13-86	8,001.15
7	7-25-86	8,170.6
		56,717.55 Short Tons

The amount of iron ore remaining on site is difficult to estimate with precision. By volume there appears to be approximately 10 percent of the original amount remaining. By weight we could have between 8 and 15 percent remaining depending on the densities of the remaining materials. In any case, we have removed for recycle or reuse more than "75 percent by weight or volume of the amount of that material accumulated at the beginning of the period" by the terms of the variance granted until July 31, 1986 (CFR Part 261.1 [c][6]).

Included for documentation is a copy of the contract with Canada Cement LaFarge LTD., and copies of the marine surveyor weight certificates on each barge shipped. If you have any questions, contact either Dick Bird or Tom McCue at (503) 286-9651.

Sincerely,

Tom McCue

Tom McCue
Environmental Manager

cc: Marvin Durning, Durning, Webster & Lonnquist
Kenneth Feigner, EPA - Region 10
Dick Bird, Oregon Steel Mills

CANADA CEMENT LAFARGE LTD

PACIFIC REGION

THE VENDOR

OREGON STEEL MILLS

Box 2760

Portland, Oregon 97208

DATE Nov. 29, 1985.

18386 M

PLEASE SHOW THIS NUMBER ON A CORRESPONDENCE. INVOICES PAC ING SLIPS AND BILLS OF LADING

SHIPPING INSTRUCTIONS

LINE NO	RECD CORRECT	QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
1		35,000 tons (approx.) iron ore material			
2		- Material in the former Direct Reduction Division			
3		burned storage facility at Oregon Steel Mills			
4		(OSM) in Portland, OOregon.			
5		Specifications: If the material shipped averages			
6		less than 65.8 % dry basis), the price will be			
7		lowered to reflect the lower Fe content as set			
8		out under Price Adjustments below.			
9					
		Price: $16.00 US per short ton on a dry basis			
12		delivered by barge to C.C.L's Richmond Plant.			
13		Off loading at Richmond plant is at OSM's			
		expense. cont'd .../2			

C ☒ O ☐ A ☐

RECEIVER

ORIGINATOR

SIGNATURE

TO BE APPROVED BY

APPROVED FOR PAYMENT

SIGNATURE

CHARGE TO ACCOUNT NUMBER (S) | ACCOUNT 50-6060 | COST CENTRE 101 | EQUIPMENT NO.

TO BE USED FOR (IF RESALE D/S NOS.)

FED SALES TAX EXEMPT ☒ CHARGE ☐ INCLUDED ☐

PROV SALES TAX EXEMPT ☒ NO 238475 CHARGE ☐

LINE	QUANTITY	DATE	UNIT	LINE	QUANTITY	DATE	UNIT

CANADA CEMENT LAFARGE LTD
PACIFIC REGION

AUTHORIZED SIGNATURE

PURCHASE ORDER - PART 5

PURCHASING AGENT OR BUY

TO THE VENDOR

OREGON STEEL MILLS

DATE Nov. 29, 1985 NO. 18386 E.

PLEASE SHOW THIS NUMBER ON
CORRESPONDENCE INVOICES
ING SLIPS AND BILLS OF LADING
INVOICE IN TRIPLI

SEE PRINTED INSTRUCTIONS

LINE NO.	QUANTITY	DESCRIPTION	UNIT PRICE	AMO.
1		Price Adjustments		
2		a) Iron Content - if the average Fe content		
3		(dry basis) of the material shipped is		
4		less than 65.0% by weight (dry basis), the		
5		$16.09 US per short ton (dry basis) price		
6		will be lowered in proportion as the per-		
7		centage Fe content is to 65.0%.		
8		eg. Average Fe content is 64.0% (dry basis)		
9		Price is adjusted as follows:		
10		$\frac{64.0}{65.0} = .98$		
12		Price (dry basis) = 1609 x .98 = $15.77		
13		This price is now subject to the moisture		

adjustment as per (b).

...../3

PACIFIC RIM ORE

TO THE VENDOR

OREGON STEEL MILLS

DATE Nov. 29, 1985. NO. 18386 E.

PLEASE SHOW THIS NUMBER ON CORRESPONDENCE INVOICES PACKING SLIPS AND BILLS OF LADING

INVOICE IN TRIPLICATE

SHIPPING INSTRUCTIONS

LINE NO.	BILL CODE	QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
1			b) Moisture: The $16.09 US per short ton (dry basis)		
2			cost will be adjusted for moisture content by		
3			reducing the weight as received (wet basis) in		
4			proportion to the moisture content of the material		
5			received (i.e. measured in the barge as it is		
6			unloaded at C.C.L.'s plant site).		
7			eg. If material received contains 13% moisture		
8			by weight, the dry basis weight will be 100% - 13%		
9			or 87% of the as received weight (wet basis). The		
10			price will be $16.09 x .87 x weight as received		
11			which is equivalent to $14.00 x weight (wet basis).		
12					
13			Analysis: Analysis of Fe content and moisture will be		

done by C.C.L. at its own expense at the time of arrival at its Richmond Plant. A sample split of each shipment will be retained for a referee sample should OSM question C.C.L.'s analysis.

...../4

PACIFIC RIM ...

TO THE VENDOR

OREGON STEEL MILLS

DATE Nov. 29, 1985. NO. 18386 H.

PLEASE SHOW THIS NUMBER ON CORRESPONDENCE INVOICES SHIPPING SLIPS AND BILLS OF LADING
INVOICE IN TRIPLI

SHIPPING INSTRUCTIONS

LINE NO.	DEPT. CODE	QUANTITY	DESCRIPTION	UNIT PRICE	AMO
1			Weight Determination: The weight of material		
2			purchased will be determined in the loaded barges		
3			at Portland Oregon by a licensed marine surveyor and		
4			will constitute the basis of OSM invoices to C.C.L.		
5			If disputed, the parties will discuss and reach a		
6			mutually acceptable conclusion.		
7				-	
8			Payment Terms:		
9			a) Up Front Payment: C.C.L. agrees to pay $30,000 US		
			on completion of unloading first barge.		
11			b) Deferred Payments: The balance of the first ship-		
12			ment as well as all subsequent barge shipments		
13			will be paid for by C.C.L. to OSM based on C.C.L.'s		

actual monthly usage of the iron ore material. The price of the material will be calculated upon arrival of the three barges and after adjustments for iron content and moisture.

...../5

PACIFIC DIVISION

TO THE VENDOR

OREGON STEEL MILLS

DATE Nov. 29, 1985. NO. 16386 E.

PLEASE SHOW THIS NUMBER ON CORRESPONDENCE, INVOICES, ING SLIPS AND BILLS OF LADING
INVOICE IN TRIPLI

SHIPPING INSTRUCTIONS

UNIT NO.	BILL CHARGE	QUANTITY	DESCRIPTION	UNIT PRICE	AMO
1			Sample calculation is as follows:		
2			Total Shipment - 35,000 short tons (wet basis)		
3			- assume 13% moisture		
4			Shipment (dry basis) is 35,000 x .87 = 30,450 short ton		
5			Dry basis price - $16.09 US per short ton		
6			Iron adjustment - assume nil.		
7					
8			Total owing to OSM - 30,450 x $16.09 =	$489,940	
9			Less: up front payment =	30,000	
10			Balance owing =	$459,940	
12			Balance owing per dry ton used =	$459,940	
13				30,450	
			=	$15.10	

C.C.L. will provide OSM with actual monthly material usage reports so that OSM can invoice C.C.L. for their monthly consumption.

...../6

PLEASE SHOW THIS NUMBER ON CORRESPONDENCE, INVOICES, ING SLIPS AND BILLS OF LADING
INVOICE IN TRIPLI

LINE NO.	DIST. CODE	QUANTITY	DESCRIPTION	UNIT PRICE	AMO
1			c) C.C.L. anticipates but does not guarantee taking		
2			4,000 short tons per year of the OSM iron ore material		
3			or an average of 333 tons per month.		
4					
5					
6					
7					
8			Effect of Permanent Closure of Richmond Plant:		
9			The parties have no expectation at this time of		
10			permanent closure of the Richmond plant, but		
			recognize that use of the materials by C.C.L. in		
12			making cement will stretch out over a number of		
13			years. In the event that C.C.L.'s Richmond plant		

is permanently shut down before all the material has been used, C.C.L. will have no further obligation for any additional payments for the material remaining unused and title to this remaining unused material shall revert to OSM. OSM will have a reasonable time, which shall be not less than two years, to resell the material and transfer if off C.C.L.'s plant site or make other arrangements. OSM will not be required to pay to C.C.L. any rent, storage charge, insurance, or any other fees, costs, or rebates of any kind in connection with the reversion of title of the material and its presence on C.C.L's sites during the reasonable period and OSM will have the right itself or through its agents to enter C.C.L.'s property as appropriate to carry out the sales or other arrangements for the material. If title to any of the material shall revert to OSM as a result of the permanent closure of C.C.L.'s Richmond plant,

...../7

TO THE VENDOR

OREGON STEEL MILLS

DATE Nov. 9, 1985. NO. 153EE E.

PLEASE SHOW THIS NUMBER ON CORRESPONDENCE INVOICES SHIPPING SLIPS AND BILLS OF LADING
INVOICE IN TRIPLI

SHIPPING INSTRUCTIONS

UNIT NO	ORDER CODE	QUANTITY	DESCRIPTION	UNIT PRICE	AMO
1			C.C.L. shall turn over the material in safe condition		
2			to OSM and shall be responsible for protecting the		
3			material and keeping it in a safe condition (at its		
4			own expense) during the reasonable period of sale or		
5			other disposition provided for above.		
6					
7			Transfer of Title: Title to the materials sold will		
8	—		be in OSM until the barge arrives and material is		
9	—		transferred into C.C.L.'s hopper at C.C.L.'s		
10			Richmond plant site at which time it shall shift		
11			to C.C.L. Except as provided above for material		
			for which title may have reverted to OSM, all risks		
12			of loss or damage shall be borne by the party having		
			title.		

CODE 503
PHONE 288 3747

WALTER O. HAINES & CO.

Marine Surveyors • Cargo Surveyors and Appraisers • Inspections

Board of Trade Bldg., Suite 555
310 S.W. 4th Avenue
Portland, Oregon 97204

WEIGHT CERTIFICATE
BASED ON DISPLACEMENT

Vessel "SEASPAN 251"
Loaded at International Terminals

Report No. 85-12211
A/c Oregon Steel Mills

		Initial:1400 hrs December 3, 1985	Final:1500 hrs December 7, 1985
1.	Mean Draft Forward	3' 03.75"	18' 07.2"
2.	Mean Draft Aft	3' 05.875"	19' 07.7"
3.	Mean Draft Forward & Aft	3' 04.8125"	19' 01.45"
4.	Midship Draft - Port	3' 03.0"	19' 03.1"
	- Stbd	3' 07.0"	19' 02.3"
	- Mean	3' 05.0"	19' 02.7"
5.	Mean of 3 & 4	3' 04.90625	19' 02.075"
6.	Mean of 4 & 5	3' 04.953125	19' 02.3875"
7.	Displacement per Tables	2,140.9 ST	14,175.2 ST

A. Initial	2,140.9 ST
B. Final	14,175.2 ST
C. Difference	12,034.3 ST
Corrections	0.0 ST

-IRON ORE CONCENTRATE-

14. TOTAL CARGO ABOARD - 12,034.3 S/TONS BARGE # 1
10,917.4 M/TONS (Factor 1.10231)
10,745.0 L/TONS (Factor 0.98421)

Note: Calculations in this report of survey based upon Deadweight Scale for barge "SEASPAN 251", supplied by Seaspan International, Ltd.

By David A. Dent
David A. Dent

WALTER O. H. NES & CO.
Marine Surveyors • Cargo Surveyors and Appraisers • Inspectors

Board of Trade Bldg., Suite 555
310 S.W. 4th Avenue
Portland, Oregon 97204

WEIGHT CERTIFICATE
BASED ON DISPLACEMENT

Vessel: Barge "MLC 340-2"
Loaded at International Terminal

Report No. 86-310
A/c Oregon Steel Mills

		Initial: 1530 hrs March 24, 1986		Final: 1400 hrs March 28, 1986	
1.	Mean Draft Forward	2' 04.5"		16' 05.75"	
2.	Mean Draft Aft	3' 06.75"		17' 01.25"	
3.	Mean Draft Forward & Aft	2' 11.625"		16' 09.5"	
4.	Displacement per Tables	1,950.0	LT	12,270.0	LT
5.	Density Correction	- 47.6	LT	- 299.3	LT
6.	Displacement Corrected	1,902.4	LT	11,970.7	LT

A. Initial	1,902.4	LT
B. Final	11,970.7	LT
C. Difference	10,068.3	LT
Corrections	0.0	LT

-IRON ORE CONCENTRATE-

14. TOTAL CARGO ABOARD -

10,068.3 L/TONS
11,276.5 S/TONS
10,229.9 M/TONS (Factor .98421 LT)

Note: Calculations in this report of survey based upon Displacement Lines of Curve supplied by carrier.

WALTER O. HAINES & CO.

David A. Dent

WALTER O. HAINES & CO.
Marine Surveyors • Cargo Surveyors and Appraisers • Inspections
226-3747
Board of Trade Bldg., Suite 555
310 S.W. 4th Avenue
Portland, Oregon 97204

WEIGHT CERTIFICATE
BASED ON DISPLACEMENT

Vessel: Barge "MLC-340-2"
Loaded at International Terms.

Report No. 86-356
A/c Oregon Steel Mills

		Initial:0730 hrs June 1, 1986		Final:2330 hrs June 2, 1986	
1.	Mean Draft Forward	2' 07.00"		11' 03.00"	
2.	Mean Draft Aft	3' 02.00"		12' 08.00"	
3.	Mean Draft Forward & Aft	2' 10.50"		11' 11.50"	
4.	Displacement per Tables	1,970.0	LT	8,470.0	LT
5.	Density Correction	- 48.0	LT	-206.6	LT
6.	Displacement Corrected	1,922.0	LT	8,263.4	LT

A. Initial	1,922.0	LT	
B. Final	8,263.4	LT	-IRON ORE FINES-
C. Difference	6,341.4	LT	
Corrections	0.0	ST	

7. TOTAL CARGO ABOARD -

6,341.4 L/TONS
6,443.1 M/TONS (Factor .98421)
7,102.3 S/TONS (Factor 1.10231)

Note: Calculations in this report of survey based upon Curves [illegible] and Deadweight Scale for Barge "MLC-340-2" supplied by the [illegible] owners.

WALTER O. HAINES & CO.

David A. Dent

WALTER O. HAINES & CO.
Marine Surveyors • Cargo Surveyors and Appraisers • Inspections

Board of Trade Bldg Suite 555
310 S.W. 4th Avenue
Portland, Oregon 97204

WEIGHT CERTIFICATE
BASED ON DISPLACEMENT

Vessel: Barge "MLC-230"
Loaded at International Terms.

Report No. 86-368
A/c Oregon Steel Mills

		Initial:0730 hrs June 18, 1986		Final:1545 hrs June 18, 1986	
1.	Mean Draft Forward	2' 03.00"		7' 11.50"	
2.	Mean Draft Aft	2' 03.50"		9' 02.00"	
3.	Mean Draft Forward & Aft	2' 03.25"		8' 06.75"	
4.	Displacement per Tables	795.0	ST	3,170.0	ST
5.	Density Correction	- 19.4	ST	- 77.3	ST
6.	Displacement Corrected	775.6	ST	3,092.7	ST

A. Initial	775.6	ST	
B. Final	3,092.7	ST	-IRON ORE FINES-
C. Difference	2,317.1	ST	
Corrections	0.0	ST	

7. TOTAL CARGO ABOARD - 2,317.1 S/TONS
2,102.0 M/TONS (Factor 1.10231)
2,068.8 L/TONS (Factor .98421)

Note: Calculations in this report of survey based upon Curves of form and Deadweight Scale for Barge "MLC-230" which were supplied by Nikum & Spaulding Associates, Inc., Naval Architects.

WALTER O. HAINES & CO.

David A. Dent

Mr. John Graff
Attending Surveyor

WALTER O. HAINES & CO.
Marine Surveyors • Cargo Surveyors and Appraisers • Inspections

Board of Trade Bldg., Suite 555
310 S.W. 4th Avenue
Portland, Oregon 97204

July 11, 1986

Mr. Fred Swanson
Oregon Steel Mills
P.O. Box 2760
Portland, OR 97208

Re: Barge "MLC-331" - Loaded June 30 thru July 1, 1986
Our Report No. 86-381

Dear Fred,

When we did the initial survey on the "MLC-331" this date we discovered an error in the first survey which was submitted on July 1, 1986.

When entering the tables on the initial cut of that survey we mixed long and short tons. Therefore, we submit the following figures as an addendum to the referenced report of survey:

TOTAL CARGO LOADED ON THE "MLC-331" WHICH COMPLETED ON July 1, 1986 IS AMMENDED TO READ AS FOLLOWS:

7,815.6 ST BARGE # 5
6,978.2 LT
7,090.1 MT

We regret this error and apologize for the inconvenience it causes you to make adjustments in your records.

Respectfully submitted,

WALTER O. HAINES & CO.

David A. Dent

cc Ms Gay Stephenson, George Bush Co.
Mr. Herb Fear, International Terminals

PHONE 228-3747

WALTER O. HAINES & CO.

Marine Surveyors • Cargo Surveyors and Appraisers • Inspections

Board of Trade Bldg., Suite 555
310 S.W. 4th Avenue
Portland, Oregon 97204

WEIGHT CERTIFICATE
BASED ON DISPLACEMENT

Vessel: Barge "MLC-331"
Loaded at International Terms.

Report No. 86-381
A/c Oregon Steel Mills

		Initial: 0930 hrs June 30, 1986		Final: 1600 hrs July 1, 1986	
1.	Mean Draft Forward	2' 08.00"		12' 06.75"	
2.	Mean Draft Aft	3' 01.00"		14' 08.25"	
3.	Mean Draft Forward & Aft	2' 10.75"		13' 07.50"	
4.	Displacement per Tables	1,442.0	LT	8,490.0	LT
5.	Density Correction	0.0	LT	0.0	LT
6.	Displacement Corrected	1,442.0	LT	8,490.0	LT

A. Initial	1,442.0	LT	
B. Final	8,490.0	LT	-IRON ORE FINES-
C. Difference	7,048.0	LT	
Corrections	+ 103.2	LT	By shore scale

7. TOTAL CARGO ABOARD - 7,151.2 L/TONS
8,009.3 S/TONS
7,265.9 M/TONS

Note: Calculations in this report of survey based upon Deadweight and Displacement Scale for Barge "MLC-331" which were supplied by the barge owners.

WALTER O. HAINES & CO.

David A. Dent

CODE 503
PHONE 228-3747

IVY TELEX
000-0000
ANSWER BACK
PRODUCT

WALTER O. HAINES & CO.

Marine Surveyors • Cargo Surveyors and Appraisers • Inspections

Board of Trade Bldg., Suite 555
310 S.W. 4th Avenue
Portland, Oregon 97204

WEIGHT CERTIFICATE
BASED ON DISPLACEMENT

VESSEL: Barge "MLC-331"
Loaded at International Terminals

Report No. 86-390
A/c Oregon Steel Mills

		Initial: 0700 July 11, 1986	Final: 1530 July 13, 1986
1.	Mean Draft Forward	2' 08.75"	12' 00.50"
2.	Mean Draft Aft.	2' 08.00"	15' 03.50"
3.	Mean Draft	2' 08.375"	15' 08.00"
4.	Displacement per Tables	1518.77 L/T	8483.65 L/T
5.	Density Correction	0.00 L/T	0.00 L/T
6.	Displacement Corrected	1518.77 L/T	8483.65 L/T

A.	Initial	1518.77 L/T
B.	Final	8483.65 L/T
C.	Difference	6964.88 L/T
	Corrections	179.00 L/T

7.	TOTAL CARGO ABOARD	7143.88 L/Tons
		8001.15 S/Tons
		7258.53 M/Tons

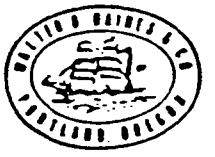
Bill of L 6

Note: Calculations in this report of survey based upon Deadweight and Displacement Scale for Barge "MLC-331" which were supplied by the barge owners.

WALTER O. HAINES & CO.

Peter Brauns

CODE NO.
PHONE 228-3747



WALTER O. HAINES & CO.

Board of Trade Bldg., Suite 535
310 S.W. 4th Avenue
Portland, Oregon 97204

WEIGHT CERTIFICATE
BASED ON DISPLACEMENT

Vessel: Barge "MLC-331"
Loaded at International Terms.

Report No. 86-397
A/c Oregon Steel Mills

		Initial:0730 hrs July 24, 1986		Final:1630 hrs July 25, 1986	
1.	Mean Draft Forward	2' 05.00"		13' 04.0"	
2.	Mean Draft Aft	2' 11.00		14' 11.00"	
3.	Mean Draft Forward & Aft	2' 08.00"		14' 01.5"	
4.	Displacement per Tables	1,483.6	LT	8,778.8	LT
5.	Density Correction	0.0	LT	0.0	LT
6.	Displacement Corrected	1,483.6	LT	8,778.8	LT

A. Initial	1,483.6	LT	
B. Final	8,778.8	LT	-IRON ORE FINES-
C. Difference	7,295.2	LT	
Corrections	0.0	LT	

7. TOTAL CARGO ABOARD - 7,295.2 L/TONS
8,170.6 S/TONS
7,412.3 M/TONS

BALE # 7

Note: Calculations in this report of survey based upon Deadweight and Displacement Scale for Barge "MLC-331" which were supplied by the barge owners.

WALTER O. HAINES & CO.

David A. Dent

Mr. Peter Brauns,
Attending Surveyor

OREGON STEEL MILLS

P.O. Box 2760
Portland, Oregon 97208
Phone (503) 286-9651

August 28, 1986

Ms. Janet A. Gillaspie
Regional Manager
Northwest Region
Department of Environmental Quality
P. O. Box 1760
Portland, Or 97204

Dear Janet:

We have decided to continue our original plans and remove all of the material in the DRD Ore Storage Facility from our property for recycling. In our last meeting you asked Tom McCue and myself how we were going to "close" the DRD Ore Storage Facility. In reviewing the regulations, we do not feel that any "closure" is required. Attached is a letter from Marvin Durning, our attorney, substantiating this.

Our plans are that after all the material is removed from this facility, we will provide you with the appropriate documentation showing that all the material has been transferred off site for recycling (Regulation 261.2 (f)).Once we do this, we have met all the obligations of the regulations and we will push in the sides and add additional fill as needed to bring the property to level again.

Hopefully, all the material will be gone sometime in 1986, and this long, troublesome project will be completed.

If you have any comments or questions on the above, please contact me directly.

Yours Respectfully,

Richard C. Bird
Manager, Process Engineering

RCB/rs
Enclosure
cc: Jan Whitworth, Manager, Hazardous Waste Section
M. Durning
B. Ferris
T. McCue

OREGON STEEL MILLS

P.O. Box 2760
Portland, Oregon 97208
Phone (503) 286-9651

Marvin D. [illegible] a copy to EPA. We were going to have meeting with Marvin & EPA but we could not get to Seattle since Seattle was fogged in. Marvin had meeting without us. (Tom [illegible] & [illegible]) [illegible]

October 13, 1986

Mr. Chuck Rice
RCRA Compliance and Permits Branch
U.S. Environmental Protection Agency
1200 Sixth Avenue
Seattle, WA 98101

RE: **EPA v. Gilmore Steel Corporation**
RCRA Docket No. X84-03-27-3008
Consent Agreement and Final Order

Dear Mr. Rice:

In his letter of September 29, 1986 on our behalf, Mr. Durning explained briefly our request to terminate monitoring pursuant to the Consent Order entered into on February 8, 1985, which will expire by its own terms on February 8, 1987. This is to provide you further information prior to our meeting on Thursday, October 16, 1986 at 2:00 p.m. in your office.

You will recall that after the signing of the Consent Order it was determined that the iron oxide material in our DRD ore storage facility was not a RCRA hazardous waste because it fell within the exemption for recyclable materials used as an ingredient to repoduce a product, and not reclaimed. This exempt status has been maintained at all times by sale and shipment of the material offsite for use in making ferric cement and by a variance granted by Oregon DEQ extending time for the shipments. We met the terms of the variance and transferred more than 75% of the material offsite for recycling before July 1, 1986, the deadline within the variance.

Indeed, we have now taken all of the material (except about two cubic yards which are wet but will be removed if required) out of the ore storage facility and all but about 2,000 tons has already been shipped offsite for recycling while the small remainder is at railhead on our site and is being shipped out at the rate of two railcars per week to a U.S. cement manufacturer for use in making ferric cement.

The eighth barge of iron ore has just been shipped to Canada Cement LaFarge LTD for use as an ingredient in the manufacture of cement. Over the past 11 months, we have shipped approximately 85,835 tons of iron ore (including moisture) out of the ore storage facility to Canada and we are happy to report that this last barge essentially emptied the iron ore storage facility.

DEQ inspected the facility on Thursday, November 9, 1986. We are awaiting word from DEQ.

In our Partial Consent Agreement and Final Order dated February 8, 1985, we were to sample and analyze the ground water out of the following wells: GS-1, GS-3, GS-8, GS-9, GS-10. To date GS-1 and GS-9 have been sampled and analyzed five consecutive quarters. GS-3 has been sampled six consecutive quarters. GS-8 and GS-10 have both been sampled for four consecutive quarters. Finally, all wells in the ground water monitoring system were sampled and analyzed for constituents in 265.92 (b) - 1, 2 and 3 in May 1986, and reported in July 1986.

GW Samplin
last even
May '8

All these samples analyzed have shown the ground water to contain no lead chromium or cadmium at a confidence level of 99 percent or better. No other contaminants have been detected that are significantly different from background.

Now that the ore storage facility is empty, rain water will fill up the area and could become a safety problem. Also, construction work on this property will be much more difficult and expensive if we wait until the heavy rains come and fill this facility. Secondly, for over three years the property has been in limbo and we have not been able to do anything with it. This is a prime piece of property on the river which Oregon Steel Mills would like to begin using again.

Under paragraph 2F of the Partial Consent Agreement and Final Order, "the terms of the Order may be modified by written mutual agreement of the parties." Therefore, we respectfully request that further sampling and analysis be waived in order that we may properly close the wells, push in the dikes, fill and level the property, and then begin using it again. Discontinuance of monitoring is necessary because filling the ore storage facility would eliminate elevation point GS-7 and wells GS-8, 9 and 10.

We look forward to meeting with you on October 16, 1986.

Very truly yours,

Richard C Bird

Richard Bird
Manager, Process Engineering

cc: Barbara Leither, Esq., EPA
Janet Gillaspie, DEQ
Marvin B. Durning
Leonard Hollenbeck
Tom McCue

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 SIXTH AVENUE
SEATTLE, WASHINGTON 98101

October 22, 1986

REPLY TO ATTN OF M/S 613

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Marvin B. Durning, Attorney
1411 Fourth Avenue Bldg., Suite 920
Seattle, Washington 98101-2212

Re: EPA v. Gilmore Steel Corporation
RCRA Docket X84-03-27-3008

Dear Mr. Durning:

This letter is in response to your letter of September 29, 1986, and Oregon Steel Mills letter of October 13, 1986, to Mr. Charles Rice of the Environmental Protection Agency, regarding Oregon Steel Mill's activities at the DRD ore storage/disposal unit at its Portland, Oregon facility.

It is our understanding that no hazardous waste remains in the referenced unit, and that this will be verified by Oregon Steel Mills within ten (10) days of the receipt of this letter. It is also our understanding that the results of the October 1986 ground water sampling at the facility will be submitted to EPA with all due speed.

Because the unit is now covered by the recycling regulations, EPA does not object to terminating the above-referenced consent agreement. This statement should satisfy the requirements of Section IV.F. of the Consent Agreement and Order, and relieve Oregon Steel Mills of any further responsibilities under the Order. In addition, EPA does not object to the construction activities described in the recent letters to EPA.

As we stated to you on October 16, 1986, EPA reserves any rights it may have to require additional monitoring or testing or other investigatory work, pursuant to Section 3013 of RCRA or other statutes, at any time in the future. EPA will continue to evaluate ground water data from the site.

If I can be of further help or you have questions or comments on this matter, please contact me at (206) 442-1191.

Technical questions should be directed to Stephanie Mead, EPA RCRA compliance officer.

Sincerely,

D. Henry Elsen
Assistant Regional Counsel

cc: Janet Gillespie, DEQ
Brett McKnight, DEQ
Oregon Steel Mills, Inc.

OREGON STEEL MILLS

PO Box 2760
Portland, Oregon 97208
Phone (503) 286-9651

October 23, 1986

Mr. Chuck Rice
RCRA Compliance and Permits Branch
U.S. Environmental Protection Agency
1200 Sixth Avenue
Seattle, WA 98101

RE: EPA v. Gilmore Steel Corporation
RCRA Docket No. X84-03-27-3008
Consent Agreement and Final Order

Dear Mr. Rice:

This is to advise you that we have removed the last few cubic yards of iron ore from the Ore Storage Facility and placed it with the small amount of material at the rail head which is being shipped to a cement manufacturer for recycling into cement.

Therefore the Ore Storage Facility is now completely empty. We again request your prompt approval to push in the dykes, etc. as per our letter of October 13, 1986.

We look forward to hearing from you soon.

Respectfully yours,

Richard C. Bird

Richard C. Bird, P.E.
Manager, Environmental & Energy

cc: Janet Gillaspie
Marvin Durning
Leonard Hollenbeck

VICTOR ATIYEH
Governor

Department of Environmental Quality

522 S.W. FIFTH AVENUE, BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

October 29, 1986

Richard C. Bird
Oregon Steel Mills
14400 N. Rivergate Blvd.
Portland, OR 97203

Re: Oregon Steel Mills
DRD Ore Storage Facility
HW-Multnomah Co.

Dear Mr. Bird:

On October 27, 1986 I inspected the DRD Ore Storage Facility at the Oregon Steel Mills plant in North Portland. In accordance with your plan to recycle the iron oxide and baghouse dust in this facility, all material has been removed from the plant site.

EP toxicity tests on the last of the material removed from the facility indicate that the material is not hazardous. You may proceed with your plans to level the storage facility and to discontinue your groundwater monitoring program.

When the last of the material has been recycled, please provide documentation on the recycling of all the material. If you have any questions, please contact me at 229-5296.

Sincerely,

Edward Woods

Edward Woods
Senior Environmental Analyst
Northwest Region

ED:y
RY3561
cc: Hazardous and Solid Waste Division, DEQ

OREGON STEEL MILLS

P.O. Box 2760
Portland, Oregon 97208
Phone (503) 286-9651

December 18, 1987

Janet A. Gillaspie
Manager, Northwest Region
Department of Environmental Quality
P.O. Box 1760
Portland, OR 97207

SUBJ: **Documentation of Iron Ore Removal for Recycling or Reuse**

Dear Ms. Gillaspie:

This letter is to inform you that all the iron ore has been shipped to either Canada Cement LaFarge, LTD, or to Ash Grove Cement West, Inc. for use as an ingredient in the manufacture of cement. The total amount of iron ore shipped is 68,963.8 short tons and is shown in the breakdown below:

	Location Shipped	Loading Completed	Amount Short Tons Shipped
Barge 1	LaFarge	12-7-85	12,034.3
2	LaFarge	3-28-86	11,276.5
3	LaFarge	6-2-86	7,102.3
4	LaFarge	6-18-86	2,317.1
5	LaFarge	7-1-86	7,815.6
6	LaFarge	7-13-86	8,001.2
7	LaFarge	7-25-86	8,170.6
8	LaFarge	9-24-86	9,116.8
RR UP18034	Ash Grove	6-26-86	79.0
UP40631	Ash Grove	7-9-86	81.3
UP18415	Ash Grove	7-11-86	74.4
UP40772	Ash Grove	7-18-86	84.9
UP40631	Ash Grove	7-23-86	85.1
UP18504	Ash Grove	7-31-86	84.4
UP18907	Ash Grove	8-7-86	89.2
UP18601	Ash Grove	8-13-86	87.5
UP18415	Ash Grove	8-20-86	93.7
UP40772	Ash Grove	8-29-86	86.0
UP40631	Ash Grove	9-5-86	98.0
UP18504	Ash Grove	9-15-86	95.7
UP18415	Ash Grove	9-17-86	85.1
UP40772	Ash Grove	9-19-86	98.3
UP18034	Ash Grove	9-24-86	95.3

	Location Shipped	Loading Completed	Amount Short Tons Shipped
RR UP18728	Ash Grove	9-29-86	95.2
UP18415	Ash Grove	10-1-86	100.1
UP40631	Ash Grove	10-7-86	99.1
UP40772	Ash Grove	10-14-86	82.1
UP18601	Ash Grove	10-20-86	69.1
MP582187	Ash Grove	10-29-86	90.1
UP40602	Ash Grove	10-29-86	94.2
UP37416	Ash Grove	10-29-86	92.4
UP39526	Ash Grove	10-29-86	96.2
TRUCK 35	Ash Grove	6-24-87	30.0
35	Ash Grove	6-25-87	30.6
35	Ash Grove	6-26-87	31.5
35	Ash Grove	6-30-87	31.0
35	Ash Grove	7-1-87	32.0
35	Ash Grove	7-7-87	30.5
35	Ash Grove	7-8-87	31.6
35	Ash Grove	7-14-87	30.3
35	Ash Grove	7-15-87	30.4
35	Ash Grove	7-22-87	30.8
33 & 28	Ash Grove	8-11-87	31.5
32 & 28	Ash Grove	8-12-87	31.8
35	Ash Grove	8-24-87	30.3
RR UP40598	Ash Grove	10-30-87	63.2
UP37286	Ash Grove	10-30-87	60.8
UP38475	Ash Grove	10-30-87	65.6
UP39172	Ash Grove	11-6-87	68.3
UP37783	Ash Grove	11-6-87	58.6
UP40342	Ash Grove	11-6-87	48.5
UP40553	Ash Grove	11-6-87	53.1
UP40264	Ash Grove	11-6-87	54.5
MP582980	Ash Grove	11-6-87	47.0
UP40533	Ash Grove	11-6-87	71.1
		Total	68,963.8

I have included documentation for all shipments above. This closes for good the iron ore storage facility at our plant. If you have any questions, please contact me at 286-9651, extension 319.

I hope that you and all the staff at DEQ have a Merry Christmas and a Happy New Year!

Respectfully yours,

Richard C Bird

Richard C. Bird

cc: Marvin Durning
Kenneth Feigner, EPA, Region 10

Science Applications International Corporation
An Employee-Owned Company
Technology Services Company

September 30, 1992 DCN: TZ4-C10021-RN-11846

Ms. Deborah Robinson
U.S. Environmental Protection Agency
Hazardous Waste Division (HW-112)
1200 Sixth Avenue
Seattle, Washington 98101

Re: EPA Contract No. 68-W9-0008
Work Assignment No. C10021, Gilmore Steel Mills RPA
SAIC/TSC Project No. 6-788-03-1400-520

Dear Ms. Robinson:

Please find enclosed the final RCRA Preliminary Assessment (RPA) report for the Gilmore Steel Mills facility located in Portland, Oregon. Because the facility submitted their responses to the VSI Needs letter as RCRA Confidential Business Information (CBI); portions of the final report that were prepared referencing this information have been designated as CBI. These sections of the report appear as bold type in the text of the document.

Please feel free to contact Kathryn Gladden at 206/485-2818 if you have any questions or comments regarding this report.

Sincerely,

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION
Technology Services Company

Kathryn Gladden
Work Assignment Manager

Enclosure
cc: M. Bailey, EPA RCRA Site Manager
M. Slater, EPA Region 10 RCRA EPI Coordinator (cover letter only)
T. Tobin, SAIC/TSC RPM (cover letter only)
K. Gladden, SAIC/TSC WAM (cover letter only)

4.7 SWMU 7 - FORMER DRD STORAGE/SLURRY POND (Photo No. 6)

4.7.1 Information Summary

Unit Description: The former Direct Reduction Department (DRD) Storage/Slurry Pond was an asphalt-lined, bermed pond used for storage of metal oxides (product) prior to reduction to be used as a part of the steel manufacturing process. The pond occupied approximately five to seven acres (Photo No. 6).(2,8,18) Iron ore fines were brought in by ship, mixed with river water while still on board, and conveyed to the pond. (Water was used to make it easier to move the ore fines.) The pond was equipped with slurry screen (toothed scraper) that was dragged through the ore to remove any large debris. There were no release pipes or overspill valves associated with this pond. After negotiation between Gilmore, ODEQ, and EPA, this pond was determined not to be a RCRA regulated unit.(10,23) Figures 2 and 5 show the location of the DRD Storage Pond onsite.

Dates of Operation: The pond was constructed during plant construction in 1969, and became inactive in 1980. Between 1984 and 1986, the remaining contents of the pond were shipped offsite for recycling. In 1986, ODEQ and EPA approved the back filling of the empty pond with soil from the berms, and other soils from onsite.(21,23)

Wastes Managed: ICA baghouse dust (K061), a listed hazardous waste, was also occasionally placed into the pond for reuse in the DRD process. Gilmore petitioned ODEQ and EPA to reclassify the dust as a recyclable material.(2,23,30,46)

Release Controls: The asphalt linings and berms acted to control spillage. Sampling results indicate that non-hazardous salts were migrating from the pond area (Section 3.6).

History of Releases: A network of monitoring wells was installed surrounding this unit. Ground water samples were collected from the monitoring wells between 1984 and October 1986. Analysis of ground water samples indicated that releases of lead and cadmium associated with K061 dust did not occur. Arsenic concentrations exceeded primary drinking water standards in several of the samples from monitoring well GS-8. Analytical data for these monitoring wells is presented in Appendix D with a discussion in section 3.6.(20,24)

4.7.2 Conclusions

The contents were reclassified and were not considered waste after 1985. Since that time, contents were removed from the pond making the potential for ongoing releases to the environment low.

APPENDIX D
1985 PCB SOIL CHARACTERIZATION ANALYTICAL DATA

COFFEY LABORATORIES, INC.
4914 N.E. 122nd Ave.
Portland, OR 97230
Phone: (503) 254-1794

October 30, 1985
Log #A851038-A
PO#: 40300

Oregon Steel Mills
P.O. Box 2760
Portland, Oregon 97208

Attention: Tom McCue

Analysis Requested: Polychlorinated Biphenyls (PCB)

Sample Description: Soil

SAMPLE ID	mg/kg PCB	MAIN ARCHLOR
Sample #1	1.1	1242
Sample #2	0.8	1242
Sample #2 (Duplicate)	0.8	1242
Sample #3	2.4	1242
Sample #4	1.8	1242
Sample #5	1.6	1242
Sample #6	1.9	1242
Sample #7	2.5	1242
Sample #7 (Duplicate)	2.6	1242
Sample #8	3.3	1242
Sample #9	7.9	1242
Sample #10	5.9	1242
Sample #11	1.7	1242
Sample #12	4.6	1242

Sincerely,
Susan M. Coffey
Susan M. Coffey,
President

SMC/gs

This report is for the sole and exclusive use of the above client. Samples are retained a maximum of 15 days from the date of this letter.

COFFEY LABORATORIES, INC.
4914 N.E. 122nd Ave.
Portland, OR 97230
Phone: (503) 254-1794

November 22, 1985
Log #H851120-C

Oregon Steel Mills
P.O. Box 2760
Portland, Oregon 97208

Attention: Tom McCue

Analysis Requested: Polychlorinated Biphenyls

SAMPLE ID	mg/kg PCB	MAIN AROCHLOR
Sample #13	4.1	1242
Sample #14	4.9	1242
Sample #15	2.6	1242
Sample #16	6.6	1242
Sample #16 Duplicate	6.3	1242

Sincerely,
Susan M. Coffey
Susan M. Coffey,
President

SMC/gs

This report is for the sole and exclusive use of the above client. Samples are retained a maximum of 15 days from the date of this letter.

APPENDIX E
EXAMPLE BORING LOGS

Boring Log and Construction Data for Monitoring Well MW-1

Geologic Log

Approx. Ground Surface Elevation in Feet:

Depth in Feet

0 — Loose, moist, brown, silty, fine to medium SAND.

5 — Becomes slightly silty.

10 — Stiff, moist, gray, slightly sandy SILT.

Medium stiff moist to wet, gray, sandy CLAY.

15 — Becomes silty, no sand.

20 — Becomes very soft, wet and slightly sandy.

25 — Becomes soft and brown.

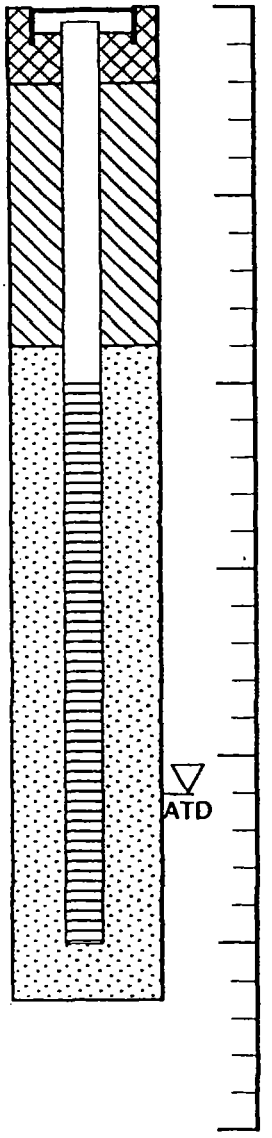
Bottom of Boring at 26.5 Feet.
Completed 3-10-93.

30

Sample	N	PID
S-1	9	<5
S-2	9	<5
S-3	9	<5
S-4	2	<5
S-5	5	<5

Monitoring Well Design

Casing Stickup in Feet: -0.33
Top of PVC in Feet:
Inside Diameter of PVC: 2



1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
4. Elevations are MSL based on C.O.P. #2888.
5. Oregon start card no. 47931.

HARTCROWSER
J-5379-03 3/93
Figure A-2

Boring Log and Construction Data for Monitoring Well MW-2

Geologic Log

Approx. Ground Surface Elevation in Feet:

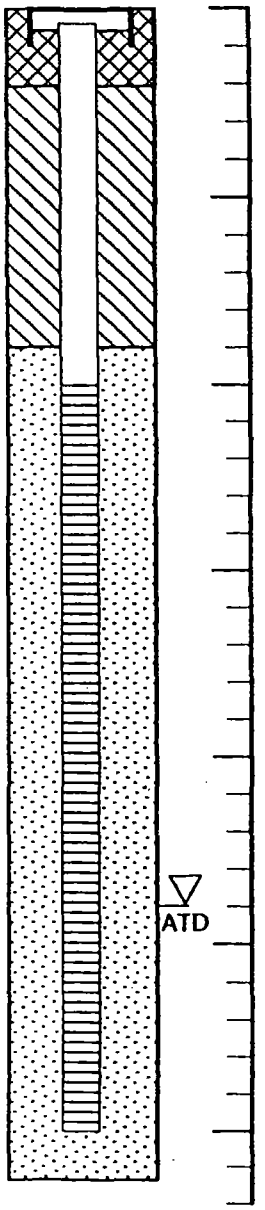
Depth in Feet

Depth	Description
0	Loose, moist, brown, silty, fine to medium SAND.
	Increase in moisture.
	Becomes very silty.
10	Decrease in silt content.
15	Soft, wet, gray CLAY.
	Loose, wet, gray, clayey SAND.
20	Medium stiff, moist, gray, slightly sandy CLAY.
25	Becomes very sandy.
30	Very loose, wet, brown, slightly silty to silty, fine SAND.
	Bottom of Boring at 31.5 Feet.
	Completed 3-10-93.

Sample	N	PID
S-1	6	<5
S-2	10	<5
S-3	4	<5
S-4	5	<5
S-5	5	<5
S-6	2	<5

Monitoring Well Design

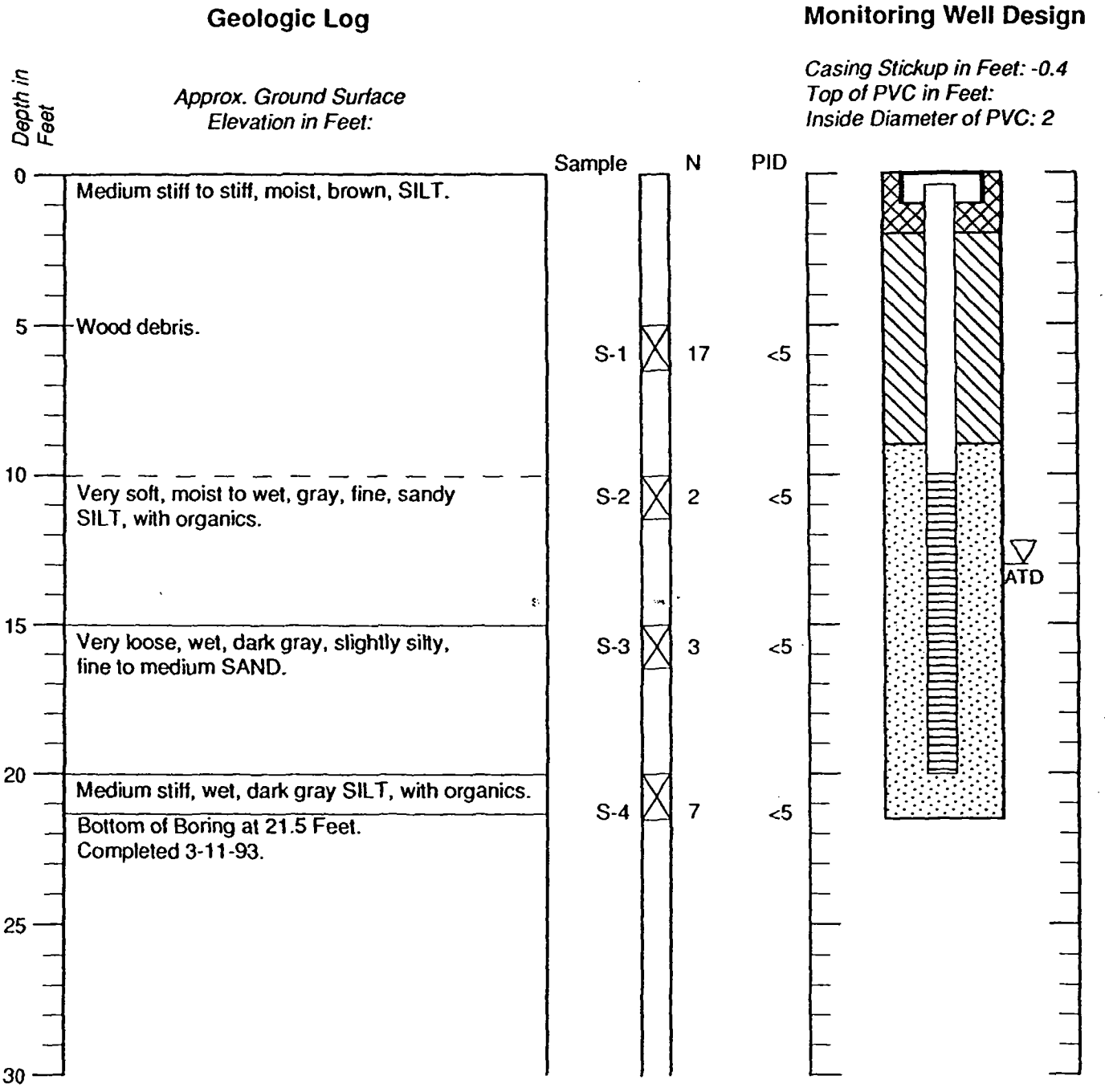
Casing Stickup in Feet: -0.36
Top of PVC in Feet:
Inside Diameter of PVC: 2



1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
4. Elevations are MSL based on C.O.P. #2888.
5. Oregon start card no. 47932.

HARTCROWSER
J-5379-03 3/93
Figure A-3

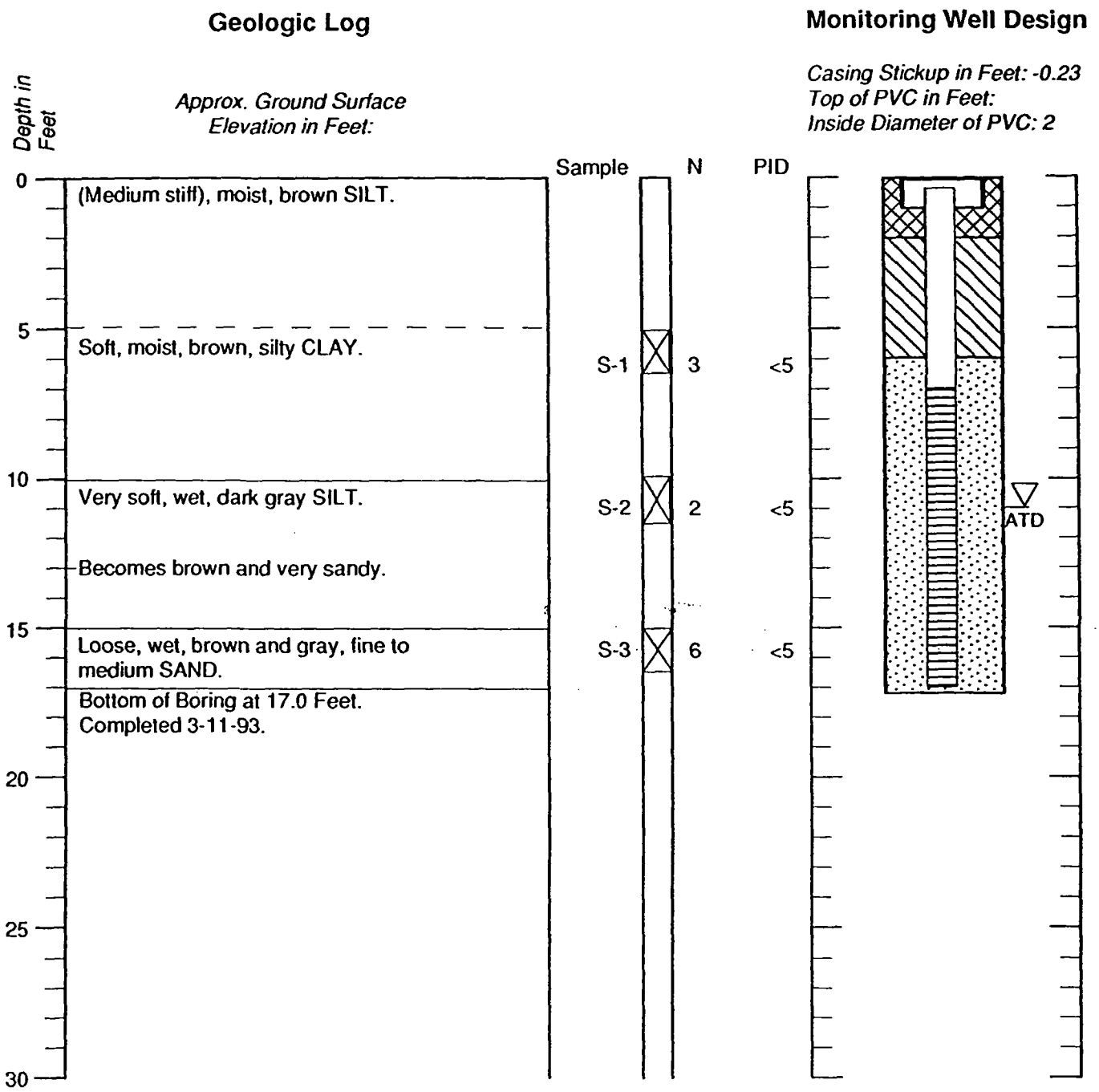
Boring Log and Construction Data for Monitoring Well MW-3



1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
4. Elevations are MSL based on C.O.P. #2888.
5. Oregon start card no. 47933.

HARTCROWSER
J-5379-03 3/93
Figure A-4

Boring Log and Construction Data for Monitoring Well MW-4

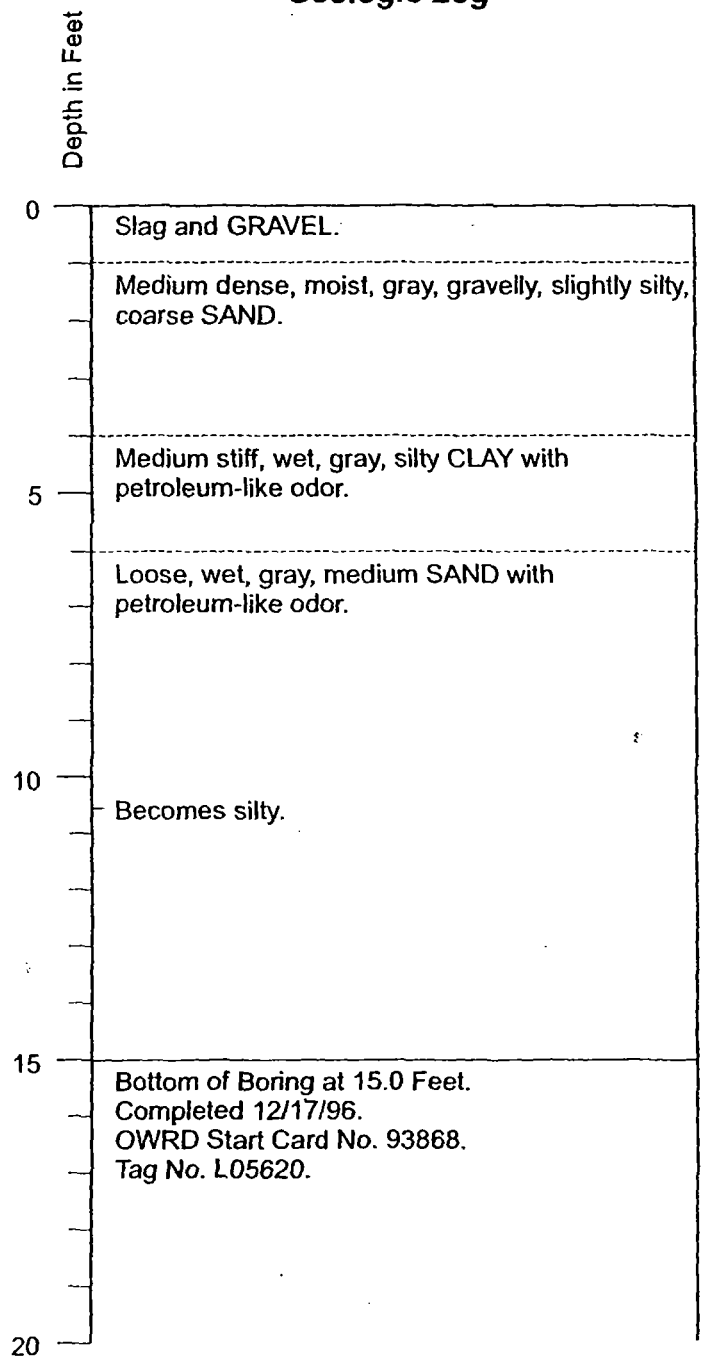


1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
4. Elevations are MSL based on C.O.P. #2888.
5. Oregon start card no. 47934.

HARTCROWSER
J-5379-03 3/93
Figure A-5

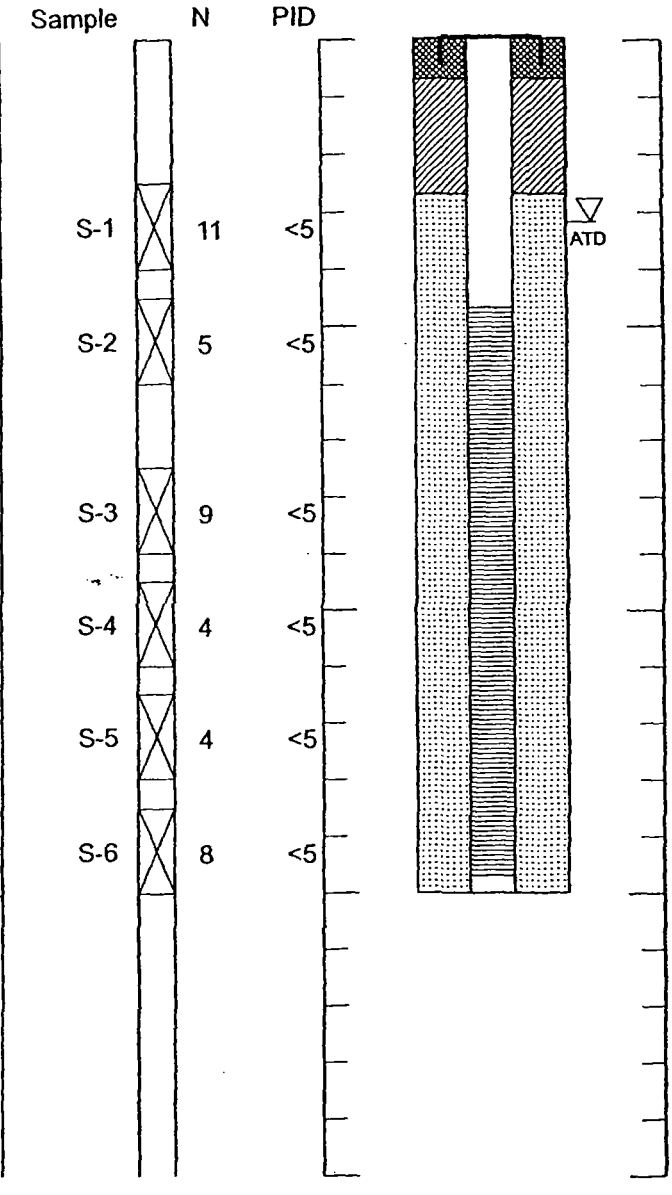
Boring Log and Construction Data for Monitoring Well RM-1

Geologic Log



Monitoring Well Design

Casing Stickup in Feet:
Top of PVC in Feet: 30.38
Inside Diameter of PVC: 2"



1. Refer to Figure A-1 for explanation of Descriptions and Symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

HARTCROWSER

J-5526-01 *1/97*

Figure A-2

Boring Log and Construction Data for Monitoring Well RM-2

Geologic Log

Depth in Feet

0 — Slag and GRAVEL.

Loose, moist, gray, slightly silty, gravelly, coarse SAND with petroleum-like odor.

Soft, wet, gray, clayey SILT with petroleum-like odor.

5

Loose, wet, gray, medium SAND with petroleum-like odor.

Stiff, wet, very sandy SILT to CLAY with petroleum-like odor.

10

Medium dense, wet, gray, medium SAND with petroleum-like odor.

15

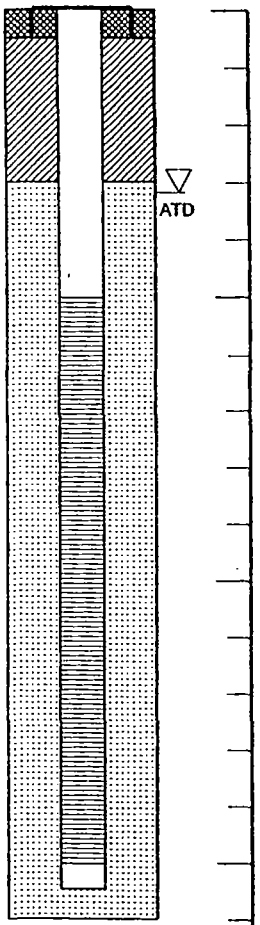
Bottom of Boring at 16.0 Feet.
Completed 12/17/96.
OWRD Start Card No. 93868.
Tag No. L05620.

20

Sample	N	PID
S-1	6	21
S-2	4	412
S-3	4	350
S-4	7	55
S-5	13	124
S-6	20	134

Monitoring Well Design

Casing Stickup in Feet:
Top of PVC in Feet: 29.40
Inside Diameter of PVC: 2"



1. Refer to Figure A-1 for explanation of Descriptions and Symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

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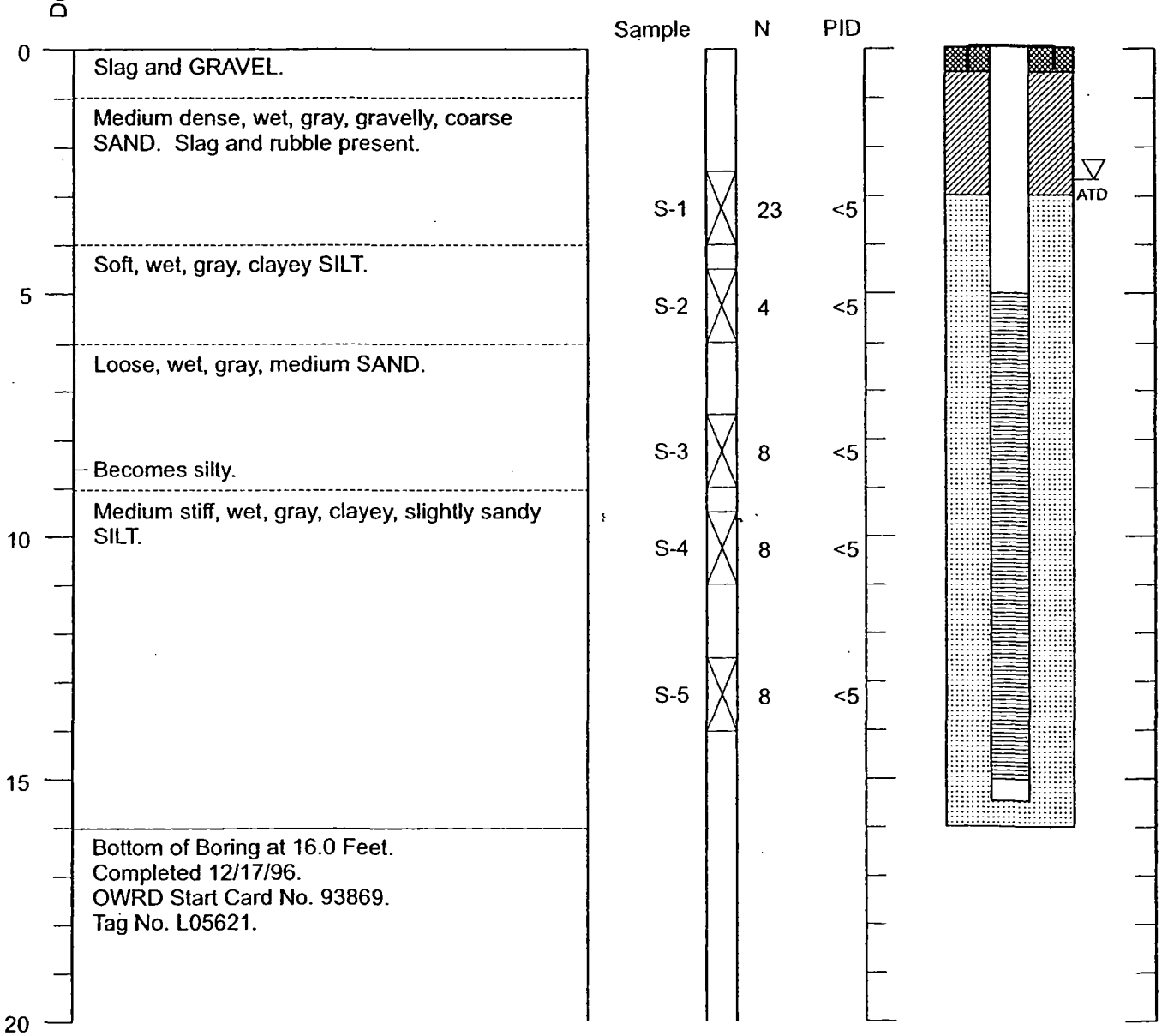
Figure A-3

Boring Log and Construction Data for Monitoring Well RM-3

Geologic Log

Monitoring Well Design

Casing Stickup in Feet:
Top of PVC in Feet: 29.60
Inside Diameter of PVC: 2"



1. Refer to Figure A-1 for explanation of Descriptions and Symbols.
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Figure A-4